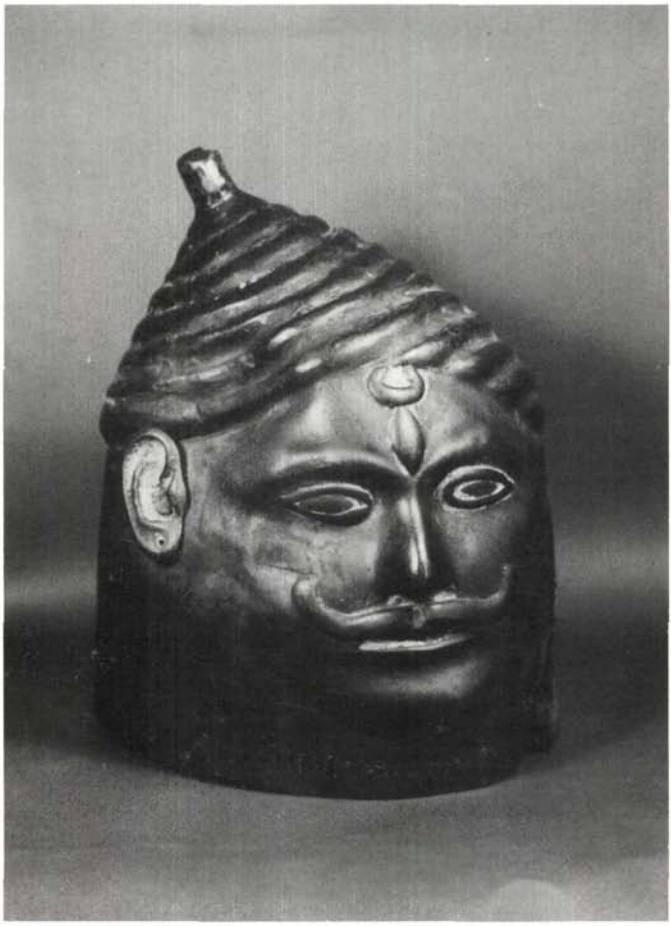
THE MANKIND QUARTERLY



VOL. XXXIII, No. 2 Winter 1992

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Apollo the Wolf-god

Daniel E. Gershenson

CONTENTS

APOLLO AND THE WOLF
EVIDENCE FOR THE WIND-WOLF
THE WOLF-NAME IN TOPONYMY
HEROES OF GREEK MYTH WHO BEAR THE WOLF-NAME OR PARTAKE IN ITS WIDER CONTEXT
THE DOLPHIN AND THE WOLF
THE WOLF AND DEATH
WEREWOLF-CONFRATERNITIES AND WIND EVIDENCE
EPILOGUE
THE STOIC EXPLANATION OF THE EPITHET LYKEIOS
THE TRIAL OF OLD THIES, 1691
LYKOS AND LYKEIOS: NOTES TOWARD A THEORY OF THE FORMS OF ANCIENT INDO-EUROPEAN RELIGIOSITY
INDEXES

ISBN 941694-38-0
Paperback, 156 pages
Price: $25.00
(Add $1.50 post and handling)

Institute for the Study of Man
6861 Elm Street, Suite 4H
McLean, Virginia 22101
Tel: (703) 442-8010 Fax: (703) 847-9524

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Vol. XXXIII, No. 2 Winter 1992

THE MANKIND QUARTERLY

EDITORIAL COMMITTEE

BRUNETTO CHIARELLI (Florence, Italy)
HANS W. JÜRGENS (Kiel, Germany)
RICHARD LYNN (Coleraine, Northern Ireland)
EDGAR C. POLOMÉ (Austin, Texas)

EDITORIAL ADVISORY BOARD

Peter Boev, Sofia, Bulgaria; Raymond B. Cattell, Honolulu, Hawaii; Tadeusz Dzierżykray-Rogalski, Warsaw, Poland; J. Balslev Jorgensen, Copenhagen, Denmark; David de Laubenfels, Syracuse, New York; Jacques Macquet, Los Angeles, California; T.L. Markey, Ann Arbor, Michigan; Umberto Melotti, Pavia, Italy; Clyde E. Noble, Athens, Georgia; Jens Palsson, Reykjavik, Iceland; Ralph M. Rowlett, Columbia, Missouri; R.J. Rummel, Manoa, Hawaii; Noel W. Smith, State University of New York at Plattsburg; Frederick J. Streng, Dallas, Texas; Charles C. Susanne, Brussels, Belgium; Daniel R. Vining, Philadelphia, Pennsylvania; Volkmar Weiss, Leipzig, Germany

FOUNDER AND FORMER EDITOR-IN-CHIEF
Robert Gayre (Edinburgh, Scotland)

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Vol. XXXIII, No. 2 Winter 1992

CONTENTS

Human Populations and the Indo-European Problem
By J. P. Mallory 131

Anglo-Saxon Kin-Class Structure
By Thomas Helmig 155

Further Observations On the Rigvedic Code
By Subhash C. Kak and David Frawley 163

"For Puruṣa's Sake": Psychoanalytic Self Psychology and the Metaphysics of Selfhood in Indian Thought: Part II and III
By Alfred Collins 171

Biased Tidings: The Media and the Cyril Burt Controversy
By Kevin Lamb 203

The Assignment of Black Children to Special Education Classes
By Russell Eisenman 227

Book Reviews 237

Cover Picture: Life-size copper-based early Indo-Aryan Vedic Head (See article: *Human Populations and the Indo-European Problem*).

The Mankind Quarterly is published by The Institute for the Study of Man, 6861 Elm St., Suite 4-H, McLean, VA 22101, U.S.A. [Tel: (703) 442-8010 – Fax: (703) 847-9524]. The price of subscriptions is $20.00 per annum for students, $32.50 for private individuals, and $70 per annum for libraries, institutions and other corporate bodies. Special reduced three-year subscription rates are available at a cost of $90 to individuals (12 issues) and $200 for libraries and other corporate bodies (12 issues). MasterCard & Visa accepted.

Copyright 1992 by The Institute for the Study of Man ISSN 0025-2344

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Human Populations and the Indo-European Problem

J. P. Mallory
Queen's University, Belfast, Northern Ireland

Since the 19th century, attempts to resolve the problem of Indo- European origins have included evidence drawn from physical anthropology. This may be broadly divided into four traditions – pigmentation, cranial index, the correlation of physical types (based on multivariate analysis) and archaeological cultures, and genetics. None of these have satisfactorily determined the location of the Indo-European homeland, however, physical anthropology may still assist in resolving the problem.

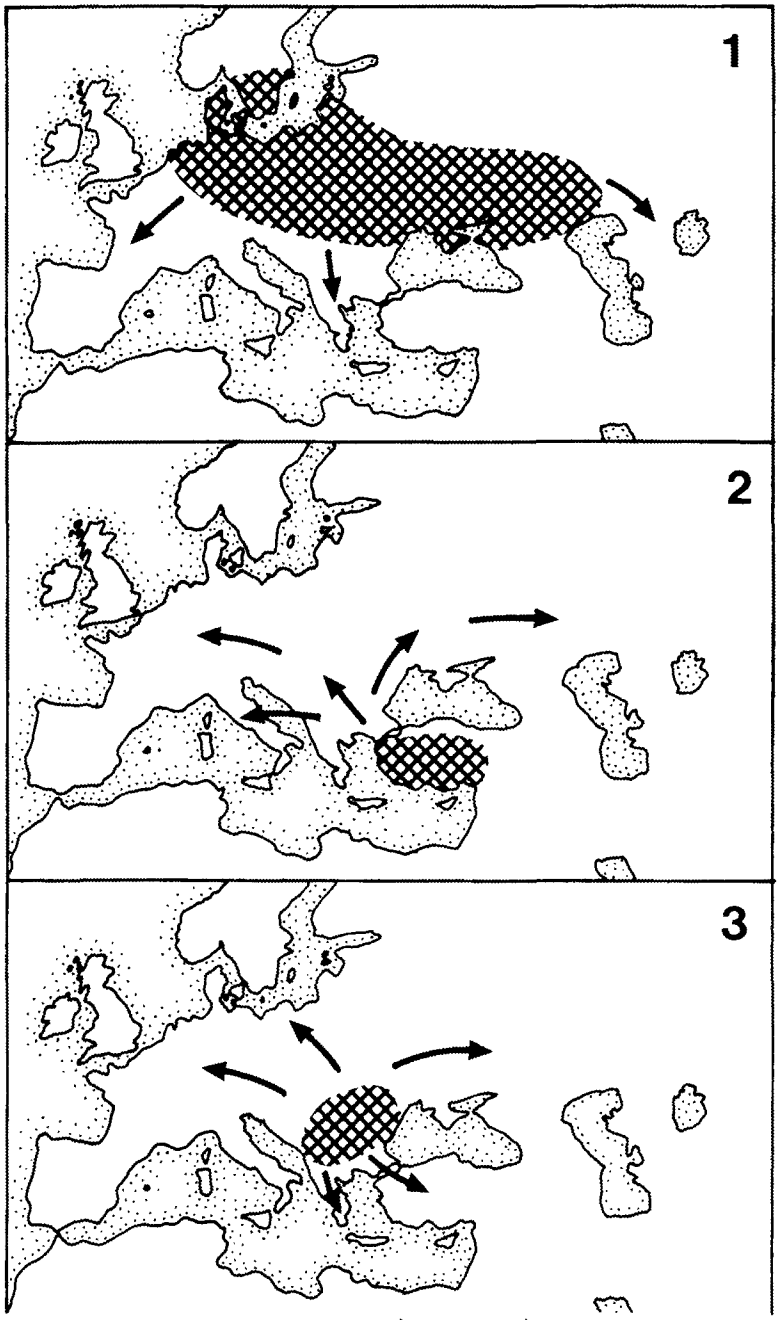
The association between the Indo-Europeans and the dispersal of human physical types has a long although hardly illustrious history. Indo-European in a strict sense defines a linguistic population, i.e. the speakers of the Indo-European languages, which now comprise the largest of the world's language families. The dispersal of the Indo-Europeans from a more confined area than that which they occupied at the time of our earliest historical records is universally acknowledged, however, the original location and the time of this dispersal, i.e. the search for the Indo-European homeland, has been a major problem of research for well over a century (Mallory 1989). This problem has not been resolved to the extent that we can talk of a general and solid academic consensus and there are a number of major competing schools of thought plus many less popular 'solutions'. Most current theories fall within the following five general hypotheses (see Figure 1).

Current Theories Regarding the Indo-European Homeland

Russia and the Ukraine during the late Neolithic and Bronze Age, e.g. Killian 1983.

1. The Indo-Europeans were present in north-central and eastern Europe since the Mesolithic hence there is no need to invoke later migrations of peoples to explain their presence in this region. They expanded from this territory after the Neolithic achieving their historical homes by the Iron Age.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

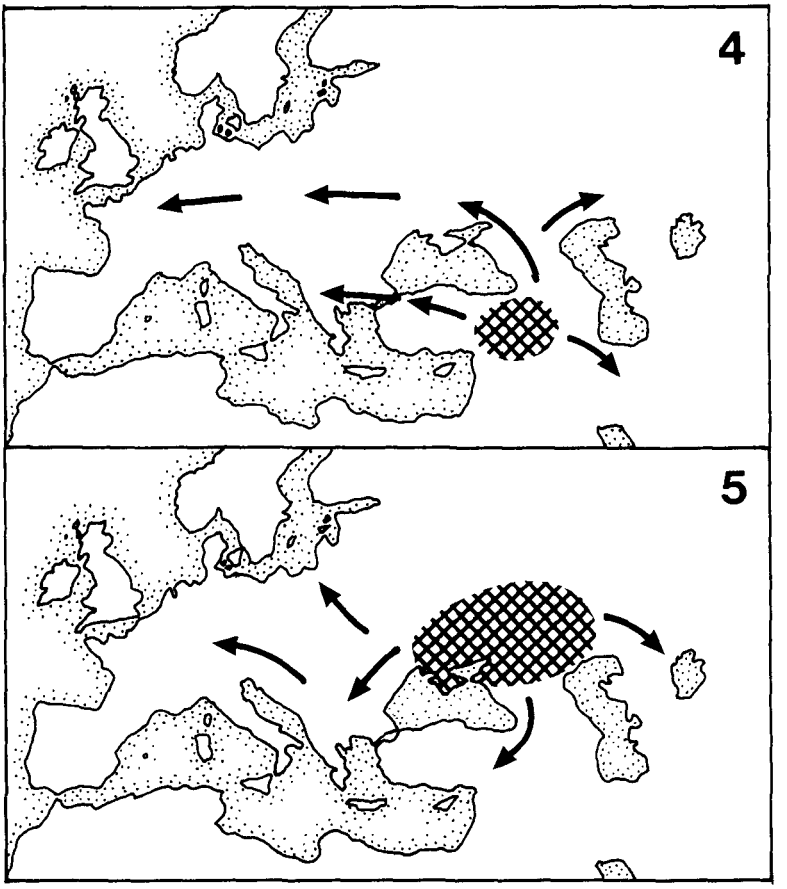


FIGURE 1: Five areal 'solutions' to the Indo-European homeland problem.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Russia and the Ukraine during the late Neolithic and Bronze Age, e.g. Killian 1983.

2. The Indo-Europeans entered Europe from Anatolia with the spread of Neolithic agriculture in the 7th millennium BC. The earliest farmers, with their greater productivity and ability to sustain greater populations and population density, largely assimilated native hunting-gathering populations in Europe as they spread across in a 'wave of advance'. Asiatic Indo-Europeans are explained either as above, i.e. a migration from the steppe region of Russia, or by direct migration from eastern Anatolia, e.g. Renfrew 1987.

3. The Indo-Europeans emerged out of the Neolithic cultures of the Balkans and/or the first farming communities of the Danubian basin. Asiatic migrations are explained as in Hypothesis 1, e.g. D'iakonov 1985.

4. The Indo-Europeans emigrated from Anatolia during the late Neolithic and/or created a general area of interaction on both sides of the Black Sea whence the Indo-European languages dispersed. Asiatic Indo-Europeans are again explained as in Hypothesis 1, or by direct migration from east Anatolia, e.g. Gamkrelidze and Ivanov 1985, a,b,c, cf. also Sherratt and Sherratt 1988.

5. The Indo-Europeans emerged originally in the Pontic-Caspian steppe and forest-steppe region at the end of the Neolithic. Asiatic Indo-Europeans are seen spreading eastwards in the 4th millennium BC while other population movements brought Indo-European language(s) westwards into the Danube region, north European plain and Balkans in the late 4th and across the 3rd millennium BC, e.g. most recently Gimbutas 1991:351-401, Anthony 1991.

The Indo-European problem itself is one of extreme concatenation, i.e. it involves a chain of so many elements – linguistic, archaeological, geographical, chronological, anthropological – that any attempt to isolate one factor for discussion risks gross over-simplification and, incidentally, helps account for the abundance of 'unsatisfactory' solutions. Anyone familiar with the history of the problem realizes that it is not difficult to propose a 'solution' in one field that is either unsupported or entirely contradicted by another, e.g. linguists may pose dialectal relationships between Indo-European languages that require, for the archaeologist, the most unlikely (and unattested) of population movements, while archaeologists can propose solutions that entirely contradict the evidence of linguistic relationships. This then is meant as a serious caveat to what I am about to embark on: a brief

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

survey of the history of research into the Indo-European problem, from the 19th century to the present day, where the evidence of physical type has been regarded as a significant if not decisive factor. Such evidence may be roughly divided into four traditions.

Language and Physical Anthropology: Early Theses Concerning the Physical Attributes of the Indo-European Speakers

Pigmentation

Some of the earliest theories concerning the physical type of the early Indo-Europeans invoked a correlation between the early speakers of Indo-European languages and skin/hair pigmentation. The arguments for assuming a distinctive pigmentation were founded on either the evidence of ancient writers as to the pigmentation of Indo-European speaking peoples in early historic times, or by analogy with the characteristics of present populations occupying areas believed by the individual authors to be the ancient homeland. As an obvious example of the first instance we have Tacitus' description of the Germans as *rutilus* or red-blond, as Caesar also described the Celts. Both C. Piétrement (1879:141) and Chavée (Martin 1874) used the physical description of the Aryan ruling class in the Indic Code of Manu and other Sanskrit sources to demonstrate that the earliest 'Aryans' were brunettes. This observation was also supported by the American anthropologist D. Brinton (1890:147-148). (More recently, T.V. Gamkrelidze and V.V. Ivanov (1985 b, 77-78) who argue for a homeland roughly corresponding to eastern Anatolia, Georgia and Armenia, suggest that the physical type of the earliest Indo-Europeans can be seen in ancient art and the present population of this region – a type "characterized by very pronounced brachycephaly, intense development of hair on the face and body, and a uniquely shaped nose." I. M. D'iakanov (1985, 153-154) took issue with this view on the grounds that "it is well-known that black eyes are a dominant feature while blue-eyes are recessive ... If this [Armenoid] population had migrated together with the languages, blue-eyed Balts could not have originated from it. Blue eyes as a recessive characteristic are met with everywhere from Europe to the Hindu Kush"; cf also Gamkrelidze and Ivanov 1985c. 182).

Poesche (1878), K. Penka (1883) and others favored the idea that the earliest Indo-Europeans were blond, and cited early descriptions of the Greeks, Germans, Celts and Scythians to demonstrate that the early Indo-Europeans were blond. They even argued that the name

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

'Aryan' derived from a root **el-* 'light', with reference to hair and skin color.

This argument continued into the 20th century with O. Reche (1936a: 304-312; 1936b), who wrote of the 'nordic ideal' underlaying the sculptures of the Greeks and Romans, and W. Sieglin (1935) who scoured Greek mythology and literature to find that the overwhelming majority (140 out of 158) of the deities and heroes were described as blond, the brunettes exceptions could in many cases be demonstrated as being non-Indo-European borrowings. The logic of the blond argument was espoused by L. Wilser (1899) and O. Reche (1920) and others who declared that the presence of blonds among all Indo-European groups indicated that they originally derived from the 'blond race'. Particularly important was the argument of autochthony applied to Nordic blonds. The logic ran that the Nordics were autochthonous to the north, and as there was no one from whom the Nordic race could have derived its blond pigmentation, then where we find blondness among other populations, it must have come from Nordics (Geiger 1878:121). The blond theory prevailed and arguments turned to the problem of exactly where the 'centre of blondness' might be located. T. Poesche (1878) advanced the oft-ridiculed theory that the Indo-European homeland was to be found in the Pripet marshes (a centre of albinism which he took for super-blondness). Much more popular was the thesis of Karl Penka (1883) that 'so eine kräftige, energische Race, wie es die blonde ist' could not have originated in the unhealthy environment of a swamp, and therefore, he suggested a south Scandinavian homeland for the Nordic blonds. Thomas Huxley (1890:750-765), on the other hand, argued that blondness more probably extended from the Baltic to the Urals.

Although the concept of the blond blue-eyed (usually 'Germanic') 'Aryan' became a racial caricature, even in the 19th century the acceptance of the equation of blond pigmentation and the early speakers of Indo-European languages did not necessarily lead to the same results. Isaac Taylor (1886; 1914), for example, noted that the Finns and Estonians were also blond but spoke a non-Indo-European language, and consequently sought to derive the Indo-Europeans from an earlier Uralic peoples, treating the Indo-Europeans as an 'improved race of Finns'. He also went on to denounce the Germans as "too phlegmatic in temperament ... and dull of intellect" to have been the "ancestor of the noble Aryan race" (I. Taylor 1914:242; cf. also Keith 1937:20, who questioned how the Indo-European languages were

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

spread by Germans who "could not maintain outside German borders their own speech?"). Clearly influenced by Taylor was the Italian anthropologist Giustiniano Nicolucci (1891:159) who queried whether the pigmentation of the original Indo-European speakers was blond or whether the Nordics had acquired their blondness from existing in 'connubium' with the Uralic blonds.

In addition to D'iakanov (1985), J. Haudry (1981) still advances the view that the early Indo-Europeans were blond, on the basis of early literary evidence, but few writers today discuss the question of blondness in the search for an Indo-European homeland, since they consider that the existence of light-haired and light-eyed Indo-Europeans is not adequate evidence to materially affect any of the competing homeland solutions. Blond pigmentation can be found in any of the regions identified as possible Indo-European homelands by current (or past, e.g. Mansion 1911) theory.

Cranial Index

Other than pigmentation, there is also a long history of employing both fossil evidence for human skulls and modern cephalic indices to identify the physical type of the original Indo-European. Initially, there was a division between those who argued that the Indo-Europeans were originally brachycranial and those who insisted that they were dolichocranial. C. Ujfalvy (Topinard 1878:248-249), for example, in examining the skull of a Tadjik from Turkestan, argued that as the Tadjik occupied an area believed to have been the staging area for Indo-Aryan migrations, his skull illustrated the largely unmixed physical type of the ancient Aryans and provided evidence that the earliest Indo-Europeans were brachycranial. Much more popular was the concept of dolichocranial Proto-Indo-Europeans (e.g. Virchow 1886:77), especially after long-headedness was associated with blondness – the *homo europaeus dolichocephalus flavus* of L. Wilser (1899) – while brachycephalics were regarded as confined to mountain fastness, e.g. Alps, Carpathians (Wolff 1914:311-312), locations where we might expect the subjugated non-Indo-European populations to have retreated after Indo-European expansions. This contrast between what were perceived as two contrasting ethnic taxa was reduced to the depths of absurdity in the writings of Georges Vacher de Lapouge who asserted that "the ancestors of the Aryans cultivated wheat when those of the brachycephalics were probably still living like monkeys" (de Lapouge 1899).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

In general, the logical premise that linked the cranial index to language was largely through assumptions regarding pigmentation, i.e. the Proto-Indo-Europeans were blond and so also the Nordids who were also dolichocranial, hence Proto-Indo-Europeans must have also been dolichocranial. This led ultimately to the accumulation of a massive amount of evidence for the origin and geographical expansion of the Nordid racial type from Scandinavia and north central Europe, which reach its climax in the works of H. F. K. Günther (1923, 1926, 1934, 1935; see also Schultz 1936 for a sympathetic history of 'Nordic' racial research). By contrast, Kellogg (1931:374) placed the origin of the dolichocranial type in south Russia. On the other hand, V. Kreve Mickevicius (1926) who argued that blondness did not exclusively correlate with dolichocranials but also included brachycranials, his 'Celto-Slavic race,' and that the descriptions in Classical literature made a much better fit with this type, whose homeland he placed between the Middle Danube and the Volga, rather than with the so-called Teutonic race (cf. also Jain 1964:116).

Outside the realm of 'pure' physical anthropology were the racial geographers who sought to apply what was perceived as geographical laws and analogies drawn from the natural sciences to trace the dispersion of human racial types. Usually, the topic of 'Aryan origins' was incidental to their work, but the theory of the Australian-based geographer Griffith Taylor calls for some mention. Taylor rightly argued that brachycephalism had increased through time but wrongly saw the original 'Aryans' as *satem*-speaking broadheads who immigrated from Asia into Europe, where they became *centum*-speakers, comparatively late, the Greeks being the first to appear *c.* 1200 BC: "Their exploits are sung in Homer, who describes the wars between the Trojan (dolichocephalic) Pelasgians and the Aryan (brachycephalic) Achaeans" (G. Taylor 1921:71). Taylor's attempt to associate brachycephalic skull shape with the early spread of Indo-European languages went to its furthest extreme when he plotted the subgroups of Indo-European languages against their respective speakers' cephalic index, i.e. his 'isokephs' (see Table 1), and attempted to read from this the linguistic history of the European languages.

Taylor's studies were part of a greater picture that sought to correlate human cephalic, linguistic and cultural evolution. Interestingly, Taylor followed the logic of his own assumptions – that dolichocephalism was a primitive trait and brachycephalism was evolutionarily

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

more advanced – and produced a scale that identified the Chinese as the most highly evolved (see Livingstone 1992:40-42).

TABLE 1

Group	Cephalic Index	Language
Centum	76?	(Tocharian)
(Dolichocephalic)	76	Gaelic
	77	Latin
	78?	(Oscan)
	78	Welsh
	78	Teuton
	79	Greek
Satem	80	Persian
	81	Slavonic
	82	Lithuanian
	83?	(Sanskrit)
	84	Galcha
(Brachycephalic)	85	Armenian

Cephalic indices and Indo-European language groups (based on G. Taylor 1921:107, tab. vii).

It might be added, that these early attempts to correlate race and language also had their persistent critics. Max Müller (1888) attacked ethnologists who confused linguistic concepts with human physical types, likening the concept of an 'Aryan race' to a 'dolichocephalic dictionary', while others such as O. Schrader (1907), S. Feist (1910), J. Kollmann (1892), and G. Sergi (1903) argued that the earliest Indo-European speakers may probably have already become racially mixed which if the case would make it idle to attempt to correlate physical type with language. Typical of those who disparaged anthropological arguments was J. Deniker (1900:377), who argued that there was no way an anthropologist could determine whether a prehistoric dolichocephalic-skulled people spoke an Aryan language or not, and R. S. Conway who wrote in 1900 that "it appears the human cranium will not bear the weight of any ethnological deductions" (Conway 1900:78). By 1945 the basic scepticism of Indo-European linguists, coupled with the application of racial dogmas by the Nazis and others (Livingstone

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

1987) largely obliterated from most academic discussion any attempt at direct correlation between physical type and linguistic group, although physical anthropology may yet be employed to resolve the IndoEuropean homeland in association with archaeological evidence.

Physical Type and Archaeology

Simplistic equations seeking to identify the skull-shape and pigmentation of the Proto-Indo-Europeans and subsequent speakers of Indo-European language were replaced by arguments where population movements, irrespective of any putative Indo-European 'racial type', were supported by the evidence gained from examining skeletal remains found in prehistoric cemeteries. It emerged out of the same tradition that sought to link language and physical type directly. For example, G. Heberer (1943:43) believed that the Indo-Europeans were originally of the Nordid racial type and noted that as dolichocranic skulls were to be found in both the Neolithic cultures of northern Europe and the central European Corded Ware horizon this whole area might have comprised the homeland. But today we know that attempts to create ethnic taxa out of a single cranial measurement is invalid (Howells 1972:175). Dolichocranial skulls can be found over most of Europe, from the Mediterranean to northern Europe both before and during the time relevant to the Indo-European homeland problem. Dolichocraniality alone does not distinguish, for example, between gracile Mediterranids and the more robust late Cro-Magnon proto-Europids. Hence any serious use of physical anthropology today tends to be founded on multivariate analysis and not *ad hoc* 'races' created solely out of the cranial index.

Contemporary Theories

If we examine the various homeland theories, almost all explain the Asiatic Indo-Europeans by population movements from Europe. This is primarily argued on archaeological rather than anthropological grounds, however, the physical type of the Afanasievo culture, an Early Bronze Age culture that occupied the Minusinsk Basin and Altay mountains (Mallory 1989:223-227), does appear to resemble quite closely contemporary populations of the south Russian steppe as is also the case with the somewhat later Andronovo culture of Central Asia (Schwidetsky and Rösing 1990:24, 31).

As for Europe itself, the arguments for autochthony, e.g. *Hypothesis 1*, do not require population movements until after the Neolithic

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

period. This hypothesis circumvents one of the major problems of all the other solutions. Few if any would deny that the populations of the steppe Eneolithic were Indo-Europeans, although everyone but supporters of *Hypothesis 5* would identify them with Indo-Iranians or some other late group and not the original Proto-Indo-Europeans.

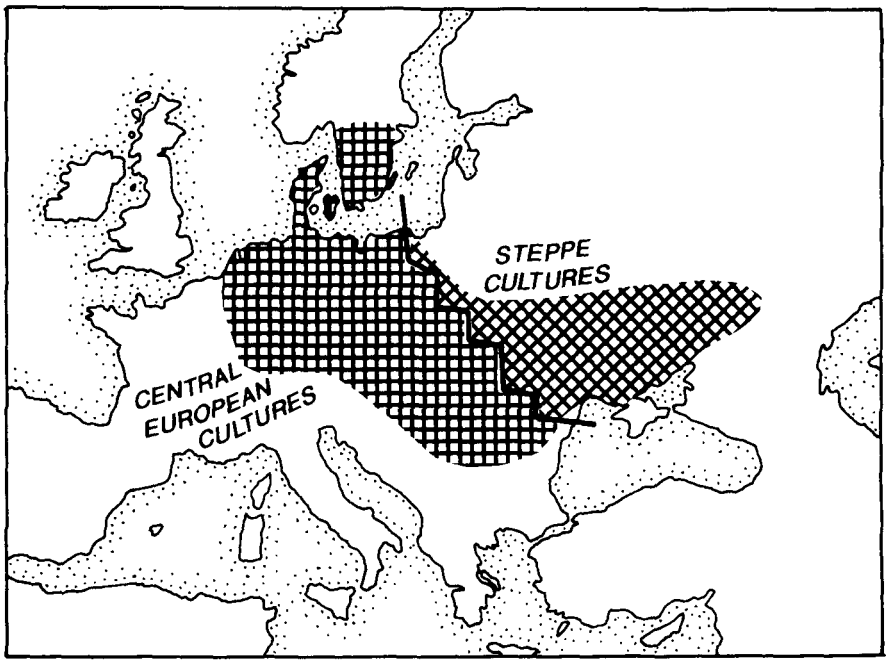


FIGURE 2: Solution 1, a homeland spanning north-central to eastern Europe, embraces both two different environments, cultural regions, and what will emerge in the Neolithic as markedly different physical types.

Similarly, almost all scholars would agree that the central European Copper Age cultures were also Indo-European, although few if any would regard them as the sole representives of the Proto-Indo-Europeans. There is, however, no wholly convincing case for population

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

movements either from central Europe into the steppe or the reverse which creates a cultural fault line for anyone who wishes to link these two areas (Fig. 2). This impasse is resolved by assigning a much larger area to the Proto-Indo-Europeans at an earlier period so that both the steppe and at least northern and central Europe should be linguistically united since the Mesolithic if not earlier. But the proposal of a common linguistic identity stretching from central Europe to the Urals also requires that this be carried out between two of the most contrasting physical types of prehistoric Europe, i.e. the more gracile population of central Europe and the hypermorphic Cro-Magnon or Proto-Europids that populated the region of Scandinavia to the steppe (Telegin and Potekhina 1987:182-189).

Hypothesis 2, concerning a movement of farmers from Anatolia through Europe, has been assessed in terms of physical anthropology and genetics, however, it is a moot point whether this necessarily impinges on Indo-European movements. The problem here is that there are two issues involved: was there a movement of Asiatic populations into Europe at the beginning of the Neolithic *c.* 7000 BC and if so, were these Indo-Europeans? The answer to the first question is probably a qualified 'yes' (qualified in terms of how far the spread of agriculture was purely a demic one), and this view is presently accepted by the majority of scholars although not all archaeologists involved in studying the earliest European farming communities would agree. The actual physical evidence is meagre since there is not a great amount of anthropological evidence for Mesolithic populations in the Balkans. That which does exist, which is confined largely to the region of the Iron Gates, shows a marked difference between Mesolithic and Neolithic physical types, however, the Iron Gates population may be an atypical isolate (Schwidetzy and Rösing 1990:19). On the other hand, there is little question that Neolithic populations in the Balkans, especially in Bulgaria and Romania, do tend to resemble closely populations in Anatolia (Schwidetzy and Rösing 1990:31). As mentioned earlier, the physical type of the earliest farmers in the Ukraine differs markedly from what are presumed to have been the indigenous population of the so-called Cro-Magnoid stock. As for northern Europe, it is much more difficult to argue for a major population influx and the emphasis here as well as around much of the European periphery is on the acculturation of local populations rather than intrusion, i.e. population movements ultimately derived from Anatolia. More importantly, acceptance of demic intrusion into southeastern

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Europe from Anatolia does not necessarily correlate with Indo-European expansions and many would regard the Neolithic populations of southeast Europe as distinctively *non*-Indo-European, e.g. Gimbutas 1991.

The evidence of physical anthropology helps expose the peculiarity of *Hypothesis 3*, a Balkan-Danubian home. If the Balkan-Danubian Neolithic is a result of a migration of Anatolian farmers, then one can hardly exclude the area of Anatolia from the homeland as this is their proposed area of origin. As we have already seen, physical anthropology suggests that the Neolithic populations of Anatolia and the east Balkans were very similar.

Hypothesis 4, late Neolithic expansions from Anatolia, in terms of the evidence of actual physical types is limited to occasional arguments for some movements into the Balkans from Anatolia or the conjectured Anatolian origins of the Beaker culture (Gerhardt 1976). More recent studies (Schwidetsky and Rösing 1990) fail to support any argument for substantial population movements other than between Anatolia and the east Balkans.

There has been substantial discussion of *Hypothesis 5* which proposes the movement of steppe populations into the Balkans and into east central Europe where, it is argued, they played a formative part in the creation of the Corded Ware horizon.

Arguments for *Hypothesis 5* are only marginally supported by the evidence of physical anthropology. As we have seen, one may with good reason propose on both archaeological grounds and physical anthropology that populations of western Siberia were closely linked to those of the European steppe and so this is still an attractive solution to the problem of many of the Asiatic Indo-Europeans. On the other hand, evidence for intrusions into the Balkans or central Europe is quite limited. A case can be made for population intrusions of steppe Proto-Europids into Romania (Necrasov 1980) during the late Neolithic. Here we find that the intrusive male population averaged 10 cms. taller than that of the local male population although differences between females of both areas were markedly less. Any attempt to go beyond Romania, however, finds the evidence for physical traces of steppe populations to fall off markedly and there is little evidence of actual population movements west of the Tisza river in Hungary (Nemeskéri and Szathmáry 1987) and no reason to see steppe populations involved in the formation of the Corded ware horizon (Schwidetzky 1980; Menk 1980) whose physical type seems to be most easily

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

explained by local Neolithic groups. Investigations in the Baltic region suggest some movement of population eastwards into Prussia and west Lithuania but here again cultural transformations seem to outrun changes in physical types (Rimantiené and Cesnys 1990; Butrimas and Cesnys 1990). One area where considerable population change has been proposed is the Baden culture (*c.* 3300-2500 BC) of the central Balkans where there does appear to be a marked break with the previous local populations which László Szathmáry tentatively suggests may derive from the southern Balkans (Szathmáry 1980) but this hardly mitigates the observation that attempts to augment the evidence for cultural (archaeological) change with analysis of human physical remains does not resolve the Indo-European problem.

Language and Genetics

The fourth tradition in the search for Indo-European origins is relatively recent (excepting an unusual attempt to relate Indo-European origins to favism and glucocose-6-phosphate-dehydrogenase deficiency [Giles 1962; cf. Andrews 1949, Boyd 1949]), and hinges on the notion that the genetic background of some population groups may correlate with language. Comparisons, for example, between genetic (and geographical) distance and a crude coding of linguistic differences reveal that "speakers of different language families in Europe differ genetically" (Sokal 1988:1726) and, in a more recent study, a survey of 33 gene-frequency boundaries in Europe were found to be coincident with 31 linguistic boundaries (Barbujani and Sokal 1990). Barbujani and Sokal suggest that genetic boundaries in Europe are primarily features of "geographical barriers and linguistic boundaries" and the authors note that "in 9 of the 11 genetic boundaries ... that are not associated with physical barriers, language barriers may oppose the process of population admixture" (Barbujani and Sokal 1990:1818). The relationship between genetics and language has been applied specifically to testing two of the hypotheses – (No. 2: Neolithic 'wave of advance') and (No. 5: steppe intrusions) regarding Indo-European origins. In the recently published study by Sokal *et al* (1992), no statistically significant correlation could be found between the distribution of the languages and the patterns predicted by either of the two theories. This study concluded that "if the IEs originated by a branching process outside or inside of Europe and the populations ancestral to the modern IE language families branched off at different times, and moved into different regions of Europe where they differed

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

subsequently, they would yield a pattern such as was found by us" (Sokal *et al* 1992:7673).

The genetic studies are on the one hand stimulating, especially as they bear on language and what one presumes are ultimately mating networks. The conclusions, however, may be faulty as they are open to some fundamental scepticism about the relationship between their proposed linguistic and genetic boundaries.

First, they are based on modern post-1945 populations and the linguistic distances and borders employed in the 'tests' are modern. For this reason, I think there is less certainty in identifying which language borders may be those that are presumed to correlate with or originally account for genetic borders. For example, Barbujani and Sokal correlate genetic and linguistic borders between the Hungarians on the one hand and both Austrians and Romance speakers on the other (Barbujani and Sokal 1990:1817). These borders are perfectly reasonable if we assume that language determined mating lines, despite the fact that the entire area incorporating Hungary, Romania and Yugoslavia was formerly an area of major population movement. Celts and Goths lived here before the coming of the Altaic speaking Avars who for a period at least occupied the same region as the Hungarians. The supposed Romance border, here identified as Romanian, is just as likely to have been the Dacian border while the Austrian, here presumably Germanic border, was previously Celtic-speaking. In short, we may find a certain correlation between linguistic and genetic borders but I am uncertain that we can define *when* and *between whom* these borders were originally established as opposed to who is presently maintaining them. Barbujani and Sokal (1990:1818) themselves seem aware of this in their suggestion that genetic borders between early Slavic and Finnic populations may be due to even earlier migrations. To some extent this may seem trivial since there is still a demonstrable relationship between language and genetic boundaries, but as we will see below, this becomes quite critical when applied to their test of two of the current homeland solutions.

Second, while statistics may support a correlation between language and genetic borders, there are curious absences, at least on their published map, that require some explanation. It seems remarkable that a genetic border should be seen to separate the linguistic communities of the Netherlands and Germany, two closely related Germanic languages, and yet no distinct genetic border is shown running through Belgium to separate Germanic (Dutch/Flemish) from

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Romance (French/Walloon) speakers. This border, presumably relatively constant for the past 1500 years, is credited to the southern push of Germanic, here Frankish and Saxon populations, into the territory of northern Belgium. Similarly, a division between northern and southern Yugoslavs is supposed to correlate with a genetic (earlier tribal) boundary while none is identified as separating Germans from Balts or Slavs where we would have supposed a somwhat more significant difference to have existed.

Third, in order to test whether the Neolithic 'wave of advance' or steppe pastoralist theory might be supported, it was necessary for Sokal and his colleagues to evaluate the correlation between genetic and linguistic distances. The published linguistic distances were based on information supplied by M. Ruhlan for 43 modern European languages. I have no intention of disputing these relationships, however, their limitations in resolving the Indo-European problem do require some comment. We have reasonable historical evidence to deny that a considerable number of these languages occupied their present positions (upon which the genetic distances were plotted) or represented linguistic borders at any time relevant to Indo-European expansions. This can be seen if we attempt to recast the genetic relationships presented in Sokal *et al* with what may have been their previous linguistic-geographical identity. The result is Table 2. Questions will be raised by linguists as to the accuracy of linguistic history as envisaged in this table, but it illustrates a line of enquiry which might well prove to be profitable.

The first four languages are Iberian and represent areas in which their present Romance descendants were preceded by Hispano-Celtic (or Celt-Iberian), a major sub-group of the Celtic languages, and both Iberian and Tartessan, two non-Indo-European languages. The next five Romance languages, Provencal to Romansh, may to varying degrees each be regarded as a former Celtic-speaking (or Venetic or Illyrian) territories. Italian as a linguistic designation is accurate but we should recall that its territory (and genetic pool) embraces previous speakers of other non-Italic languages, i.e. Venetic, Messapic, as well as a presumably non-Indo-European Etruscan.

Romanian was preceded by Dacian, Bulgarian by Thracian and indeed a number of the Slavic languages, regardless of where one sets the Slavic homeland, most certainly did not occupy their present seats until after the first century AD.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

TABLE 2
Language Distances

Sokal *et al* 1992	Modern Language	Earlier Identity	Possible Non-IE Contacts
Portuguese	Italic	Celtic	?Iberian
Galician	Italic	Celtic	?Iberian
Spanish	Italic	Celtic	?Iberian/Tartessan
Catalan	Italic	Celtic	Iberian
Provencal	Italic	Celtic	?Ligurian
French	Italic	Celtic	
Friulian	Italic	?Venetic/?Illyrian	?Raetic
Ladin	Italic	?Celtic	?Raetic
Romansh	Italic	?Celtic	?Raetic
Italian	Italic	Italic	Etruscan
Romanian	Italic	Dacian	
Sardinian	Italic	?	
Greek	Greek	Greek	
Latvian	Baltic	Baltic	
Lithuanian	Baltic	Baltic	
Russian	Slavic	Baltic/Uralic/Iranian	Turkic
Ukrainian	Slavic	?Slavic/Iranian	Turkic
Byelorussian	Slavic	?Slavic/Baltic	
Slovene	Slavic	Illyrian	
Serb/Croat	Slavic	Illyrian	Turkic
Macedonian	Slavic	Illyrian/Thracian	Turkic
Bulgarian	Slavic	Thracian	Turkic
Polish	Slavic	?Slavic	
Sorbian	Slavic	Slavic	
Czech	Slavic	Celtic	
Slovak	Slavic	Celtic?	
Danish	Germanic	Germanic	
Swedish	Germanic	Germanic	
Norwegian	Germanic	Germanic	
Icelandic	Germanic	Germanic	
Faroese	Germanic	Germanic	
German	Germanic	Germanic	
Luxembourg	Germanic	Germanic/Celtic	
Dutch	Germanic	Germanic	
Frisian	Germanic	Germanic	
English	Germanic	Celtic	
Albanian	Albanian	Illyrian	Turkic
Irish	Celtic	Celtic	
Sc. Gaelic	Celtic	Celtic/?Pictish	
Breton	Celtic	Celtic	
Welsh	Celtic	Celtic	

List of IE languages and their grouping in Sokal *et al* 1992 which were then plotted against geographical position compared with the earlier attested, i.e., non-modern linguistic-geographical areas and earlier or later non-IE 'perturbations'.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

In short, it would seem that the tests proposed by Sokal *et al* to examine the source and course of *prehistoric* migrations plot what we have every reason to believe are irrelevant (modern) language distances that are unlikely to bear on the pattern of the earlier dispersals of the Indo-European languages.

Finally, and with no criticism intended, their test of the two theories depends on the spatial and temporal elaboration of their primary proponents, Colin Renfrew (1987) and Marija Gimbutas (1991). Unfortunately, neither of these two scholars necessarily makes the most defensible case for their own theories. Renfrew's 'wave of advance', for example, could be amended to great advantage to take into consideration some acculturation on the European periphery and throughout the central and western Mediterranean in so far as the expansion of agriculture is concerned (cf. M and C. Zevelebil 1988). Similarly, Gimbutas' expansions could certainly be modified to take into consideration arguments that population movements also ran northwards along the Dnieper into northeastern Europe and the supposed evidence for wave 3 all the way to the Atlantic could certainly be deleted for lack of any compelling archaeological evidence.

Archaeology, Language and Mating Networks

From an archaeological perspective, physical anthropology has failed, at least so far, to produce substantial support for any particular theory of Indo-European origins (although it has not totally excluded any either). However, the fact that genes and languages in Europe may not vary randomly from one another suggests that the less substantial prehistoric 'artifact' of language *might* still find a shadow reflexion in the more concrete archaeological record.

The origin and the expansion of the Indo-Europeans is neither wholly a linguistic nor entirely an archaeological problem. As it involves linguistic expansions, which by their very nature demand a human vector, a movement of some people, it requires us to be able to produce models of how archaeological and linguistic phenomena may relate to one another. One of the obvious links between the two is in the arena of social interactions, including mating networks, and there have been at least attempts to establish correlations between population size, language territories, social territories, etc. for hunting-gathering populations, e.g. (Constandse-Westermann and Newell 1989). We also may find models for early agricultural systems such as that supplied by John Chapman (1989) where he suggests mating

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

territories on the order of 4000 sq km for agriculturalists (and *c.* 17,000 sq km for hunter-gather-fishers)along the Danube. This reflects the 'intuitive' consensus that would see early stable agricultural societies in terms of closed endogamous systems where we might expect greater linguistic fragmentation and ramification and more extensive open and exogamous systems operating among more mobile economies such as hunter-gatherers or pastoralists (cf. Fodor 1965). Serious discussion of the nature of prehistoric mating systems is still in its infancy but this horizon has at least been opened for archaeological discussion. Unfortunately, we can only examine our ability to discern open and closed social systems by appealing to 'pure' archaeological evidence, e.g. Gamble (1986) on the Upper Palaeolithic distribution of venus figurines.

Attempts at discerning broader correlations between physical types and archaeological cultures on the basis of multivariate analysis, e.g. Schwidetzky and Rösing 1990, seem to either deny the existence of putative open systems, (e.g. widespread cultures like the Corded Ware horizon do not reflect a homogeneity of physical population), or it challenges us to reject our assumptions, (i.e. that the Corded Ware horizon reflects a social/mating territory and is not, for example, a product of a cultural diffusion, cult package, peer polity relationships, etc.) Fossil DNA studies may ultimately prove decisive in determining the genetic links within and between archaeological "cultures" and an obvious though perhaps unrealistic goal would be to reconstruct the patterns of social/mating territories across Eurasia through time. The correlation between these and putative prehistoric language territories might then be proposed, no matter how vaguely expressed, on the basis of something other than the mirage that is often thrown up by archaeological evidence. In any event, I think we are unlikely to ever be satisfied with any solution to the homeland problem that does not convincingly model all these aspects of human behaviour through time. Physical anthropology may still play a crucial role in resolving the problem of Indo-European origins.

References

Andrews, A.
1949 The bean and Indo-European totemism. *American Anthropologist* 51:274-292.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Anthony, D. W.
1991 The archaeology of Indo-European origins. *Journal of Indo-European Studies* 19:193-222.
Barbujani, G. and R. R. Sokal
1990 Zones of sharp genetic change in Europe are also linguistic boundaries. *Proc. Natl. Acad. Sci USA* 87:1816-1819.
Boyd, W.
1949 Notes on Andrew's 'Bean and Indo-European totemism'. *American Anthropologist* 51:679.
Brinton, D.
1890 *Races and Peoples: Lectures on the Science of Ethnology*. New York.
Butrimas, A. and G. Cesnys
1990 The emergence of the Pamariu (Baltic Coastal) Group of Indo-Europeans according to archaeological and anthropological data. *Journal of Indo-European Studies* 18:359-377.
Chapman, J.
1989 Demographic trends in neothermal south-east Europe, in *The Mesolithic in Europe*, ed. C. Bonsall, Edinburgh, 500-515.
Constandse-Westermann, T. S. and R. R. Newell
1989 Social and biological aspects of the western European mesolithic population structure: a comparison with the demography of North American Indians, in *The Mesolithic in Europe*, ed. C. Bonsall, Edinburgh, 106-115.
Conway, R. S.
1900 The riddle of the nations. *Current Review* 77:74-81.
Deniker, J.
1900 *Les Races et les Peuples de la Terre*. Paris.
D'iakonov, I.
1985 On the original home of the speakers of Indo-European. *Journal of Indo-European Studies* 13:92-174.
Feist, S.
1910 *Europa in Lichte der Vorgeschichte und die Ergebnisse der vergleichenden indogermanischen Sprachwissenschaft*. [Quellen und Forschung zur alten Geschichte und geographie 19]. Berlin.
Fodor, I.
1965 *The Rate of Linguistic Change*. (Janua Linguarum 43). The Hague.
Gamkrelidze, T. and I. Ivanov
1985a The ancient Near East and the Indo-European question. *Journal of Indo-European Studies* 13:3-48.
1985b The Migrations of Tribes Speaking Indo-European Dialects from their Original Homeland in the Near East to their Historical Habitations in Eurasia. *Journal of Indo-European Studies* 13:49-91.
1985c The Problem of the Original Homeland of the Speakers of Indo-European Languages in Response to I.M. Diakonoff's Article. *Journal of Indo-European Studies* 13:175-184.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Geiger, L.
1878 *Zur Entwicklungsgeschichte der Menscheit*. Stuttgart.
Gerhardt, K.
1976 Anthropotypologie der Glockenbecherleute in ohren Ausschwärelandschaften, in *Glockenbechersymposion,Oberreid 1974*. Bussum-Haarlem, 147-164.
Giles, E.
1962 Favism, sex-linkage and the Indo-European kinship system. *Southwestern Journal of Anthropology* 18:286-290.
Gimbutas, M.
1991 *The Civilization of the Goddess*. San Francisco.
Günther, H. F. K.
1923 *Rassenkunde der deutschen Volk*. Munich.
1926 *Rassenkunde Europas*. Munich.
1934 *Die nordische Rasse bei der Indogermanen Asiens*. Munich.
1936 Indogermanen und Germanentum, rassenkundlich betrachtet, in *Germanen und Indogermanen*, ed. H. Arntz, vol 1:317-340.
Haudry, Jean
1981 *Les Indo-Europeéns*. Paris: Presses Universitaires de France.
Heberer, G.
1943 *Rassengeschichtliche Forschungen im indogermanischen Urheimatsgebiet*. Jena.
Howells, W. W.
1972 Analyses of patterns of variation in crania of recent man, in *The Functional and Evolutional Biology of Primates*, ed. R. Tittle, Chicago and New York, 123-151.
Huxley. T. H.
1890 The Aryan question and pre-historic man. *The Nineteenth Century*, 1890, 750-777.
Jain, R. C.
1964 *The Most Ancient Arya Society*. Rajasthan.
Haudry, Jean
1985 *Les Indo-Europeéns*. Paris: Presses Universitaires de France
Keith, A. B.
1937 The home of the Indo-Europeans. *The Indian Historical Quarterly* 13:1-30.
Kellogg, R. J.
1931 The problem of Indo-European origins. *Journal of the American Oriental Society* 51:374.
Killian, L.
1983 *Zum Ursprung der Indogermanen*. Bonn.
Kollmann, J.
1892 Die Menschenrassen Europas und die Frage nach der Herkunft der Arier. *Korrespondenzblatt der deutschen Gesellschaft für Anthropologie, Ethnologie und Urgeschichte* [Jahrg. 23], 102-106.
Kreve-Mickevicius, V.
1926 Pirmykste indoeuropieciu gimtine. *Tauta ir Zodis* 4:108-125.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

de Lapouge, G. Vacher
1899 *L'Aryen, son role social*. Paris.
Livingstone, D.
1992 'Never shall ye make the crab walk straight': An inquiry into the scientific sources of racial geography. *Nature and Science: Essays in the History of Geographical Knowledge*, ed. F. Driver and G. Rose (Historical Geography Research Series 28), 37-48.
1987 *Nathaniel Southgate Shaler and the Culture of American Science*. Tuscaloosa and London.
Mallory, J. P.
1989 *In Search of the Indo-Europeans*. London.
Mansion, J.
1911 Le pays d'origenes des Indo-Européens. *Revue des Questions Scientifiques* 70:217-247.
Martin, H
1874 Les celtes, selon M. le docteur Broca. *Bulletins de la Société* 9:614-636.
Menk, R.
1980 A synopsis of the physical anthropology of the Corded Ware complex on the background of the expansion of the Kurgan Culture. *Journal of Indo-European Studies* 8:361-392.
Müller, F. M.
1888 *The Biographies of Words and the Home of the Aryas*. London.
Necrasov, O.
1980 Physical anthropological characteristics of skeletons from Kurgan graves in Romania. *Journal of Indo-European Studies* 8:337-344.
Nemeskéri, J. and L. Szathmáry
1987 An anthropological evaluation of the Indo-Europan problem: the anthropological and demographic transition of the Danube basin. *Proto-Indo-European: The Archaeology of a Linguistic Problem, Studies in honor of Marija Gimbutas* (eds. S. Skomal and E. Polomé), Institite for the Study of Man, Washington , D.C., 88-121.
Nicolucci, G.
1891 Gli Aryi e le origini Europee. *Atti Accademia Pontaniana* 21:150-161.
Penka, K.
1883 *Origines Ariacae: Linguistisch-ethnologische Untersuchungen zur ältesten Geschichte der arischen Völker und Sprachen*. Vienna and Teschen.
Piétrement, C. A.
1879 Les Aryas et leur premiére patrie. *Revue de linguistique* 12:99-147.
Poesche, T.
1878 *Die Arier: Ein Beitrag zur historischen Anthropologie*. Jena.
Reche, O.
1920 Rasse und Sprache. *Archiv für Anthropologie* 46:208-218.
1936a Entstehung der nordischen Rasse und Indogermanenfrage, in *Germanen und Indogermanen*, ed. H. Arntz, vol 1:287-316.
1936b *Rasse und Heimat der Indogermanen*. Munich.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Renfrew, C.
1987 *Archaeology and Language*. London.
Rimantiene, R. and G. Cesnys
1990 The late Globular Amphora culture and its creators in the east Baltic area from archaeological and anthropological points of view. *Journal of Indo-European Studies* 18:339-358.
Schrader, O.
1907 *Sprachvergleichung und Urgeschichte*, 3rd ed. Jena.
Schultz, B. K.
1936 Das Indogermanenproblem in der Anthropologie, in *Germanen und Indogermanen*, ed. H. Arntz, vol 1:277-286.
Schwidetzky, I.
1980 The influence of the steppe people based on physical anthropological data in special consideration to the Corded-Battle-axe Culture. *Journal of Indo-European Studies* 8:345-360.
Schwidetzky, I. and F. W. Rösing
1990 Vergleichende-statistische Untersuchungen zur Anthropologie von Neolithikum und Bronzezeit. *Homo* 40:4-45.
Sergi, G.
1903 *Gli Arii in Europa e in Asia*. Torino.
Sherratt, A. and S. Sherratt
1988 The archaeology of Indo-European: an alternative view. *Antiquity* 62:584-595.
Sieglin, W.
1935 *Die blonden Haare der indogermanischen Völker des Altertums. Ein Sammlung der antiken Zeugnisse als Beitrag zur Indo-Germanenfrage*. Munich.
Sokal, R.
1988 Genetic, geographic and linguistic distancs in Europe. *Proc. Natl. Acad. Sci USA* 85:1722-1726.
Sokal, R. R., N. L. Oden and B. A. Thomson
1992 Origins of the Indo-Europeans: Genetic evidence. *Proc. Natl. Acad. Sci USA* 89:7669-7673.
Szathmáry, L.
1980 Autochthonous and immigrated components in the Carpathian Basin Copper Age. *Journal of Indo-European Studies* 8:231-244.
Taylor, G.
1921 The evolution and distribution of race, culture, and language. *Geographical Review* 11:54-119.
Taylor, I.
1886 *The Origin of the Aryans: An Account of the Prehistoric Ethnology and Civilization of Europe*, London.
1914 *The Origin of the Aryans*. 4th ed. London.
Telegin, D. Ja. and I. Potekhina
1987 *Neolithic Cemeteries and Populations in the Dnieper Basin*. BAR International Series 393. Oxford.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Topinard, P.
1878 Sur un crâne galtcjar de Penjakend (region de Tashkend, Turkestan oriental). *Bulletins de la Société d'anthropologie de Paris*, 3rd ser. 2:247-251.
Virchow, R.
1886 Eröffnungsrede. *Correspondenzblatt der deutschen Gesellschaft für Anthropologie, Ethnologie und Urgeschichte* 17:67-80.
Wilser, L.
1899 *Herkunft und Urgeschichte der Arier*. Heidelberg.
Wolff, K. F.
1914 Die Urheimat der Indogermanen. *Mannus* 6:309-321.
Zvelebil, M. and K.
1988 Agricultural transition and Indo-European dispersals. *Antiquity* 62:574-583.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Anglo-Saxon Kin-Class Structure

Thomas Helmig
Universität Tübingen

In recent years Szemerény (1977) and Hettrich (1985) have provided most comprehensive treatises in the field of Indo-European kinship terminology. The study at hand is much less ambitious. Some structures of the Old English system of kin classification are delineated, and in this context Pfeffer's (1987) analysis of Anglo-Saxon kinship is reviewed. Since Bush's study (1971) of the Latin kin-class system was overlooked by both Szemerény and Hettrich, and in Latin similar structures are found as in Old English, this work is also considered. Finally the much discussed Omaha-structure of Indo-European cultural tradition is cited with regard to the Old English kin-class structure.

In his widely read article "The structural analysis of kinship semantics," Lounsbury (1964:1091) wrote: "The 'Omaha' type of asymmetrical skewing of terminological generation gave way to a bilaterally symmetrical form of skewing such as persists in Italian and Roumanian to the present day." As an illustration the kin terms in Italian are grouped in reciprocal sets and presented in Table 1.

TABLE 1
Italian Kin Terms

padre	father	*figlio*	son
madre	mother	*figlia*	daughter
fratello	brother	*fratello*	brother
sorella	sister	*sorella*	sister
cugino	male cousin	*cugino*	male cousin
cugina	female cousin	*cugina*	female cousin
nonno	grandfather		
nonna	grandmother	*nipote*	grandchild/
zio	uncle		nephew, niece
zia	aunt		

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

On the basis of the unitary term *nipote*, not only for grandchild but also for nephew/niece, the reciprocal categories grandparent and uncle/aunt are also considered as coordinate (cf. Scheffler 1977). Since uncle and aunt are more distantly related to the propositus of the relationships than are grandfather and grandmother, uncle and aunt as well as nephew and niece are secondary classes to those of grandparent and grandchild. The following rule may hence be formulated, leaving the cousin-classes unaffected.

> **Rule 1:** Let any person's parent's sibling as a designated person be regarded as structurally equivalent to that person's grandparent as a designated person; and, conversely, let ego's sibling's child be regarded as structurally equivalent to ego's grandchild.

The structure of Old English kin-classes seems to be very similar to the class structure of present-day Italian. The Old English consanguinal kinship terms are summed up in Table 2.

TABLE 2:

Old English Consanguinal Kin-Terms

fæder	father	*sunu*	son
mōdor	mother	*dohtor*	daughter
brōðor	brother	*brōðor*	brother
sweostor	sister	*sweostor*	sister
swēor	cousin	*swēor*	cousin
ēam	mother's brother		
mōdrige	mother's sister		
fædera	father's brother	*nefa*	grandson, nephew
faðu	father's sister	*nift*	granddaughter, niece
eam[1]	father's/mother's father		
eald-fæder	father's/mother's father		
eald-mōdor	father's/mother's mother		

[1] Diverging from the statement of Gates (1971:73 fn.12) who is followed by Szemerényi (1977:181) and Hettrich (1985:457) *eam* was used for grandfather (see fn.3).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

With reference to the Italian system there are some minor structural differences: In Old English the senior collateral relatives and to a lesser degree the junior collateral relatives are distinguished additionally, whereas the cousin category is not differentiated regarding the sex of the designated person in Old English. However Rule 1 is also valid for the Old English system.

A process at least similar to the one described in Rule 1 is also identifiable in the in-law domain of Old English. Here an in-law of ego's generation (a male person's sister's husband) is equated with an in-law of the first descending generation (daughter-in-law of a male person). The in-law terms for Old English are summarized in Table 3.

TABLE 3:
Old English kin-terms of the in-law domain

A question-mark indicates that no lexemic expression could be found for the respective kin type.

*sweor*father-in-law	*snoru*	son-in-law
sweger mother-in-law	*aðum*	daughter-in-law
? wife's brother	*aðum*	a male person's sister's husband
? wife's sister	?	a female person's sister's husband[2]
tācor husband's brother	?	a male person's brother's wife
? husband's sister	?	a female person's sister's wife

On the basis of the data in Table 3 further rules must be formulated. Two such possible rules are presented:

Rule 2 Let a spouse's sibling as a designated kinsman be regarded as structurally equivalent to that spouse's parent as a designated kinsman; and conversely, let ego's sibling's spouse be regarded as structurally equivalent to ego's child's spouse.

Rule 3 Let a male ego's sister's husband as a designated kinsman be regarded as structurally equivalent to a male ego's

[2] Textual evidence for the denotation 'a female person's sister's husband' could not be found for the term *aðum* although this term is rendered with "a sister's husband" in Bosworth and Toller 1882:59). With regard to an Omaha structure the sex of ego is important.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

daughter's husband as a designated kinsman ; and, conversely, let ego's wife's brother as a designated kinsman be regarded as structurally equivalent to ego's wife's father as a designated person.

The last rule is a restricted "Omaha"-III-rule (Lounsbury 1964.372-375). But because the data are so fragmentary, neither the "Omaha" rule nor Rule 2 can be tested adequately.

In the consanguineal senior domain the process of Rule 1 becomes evident only in the term *ēam*, which is used for grandfather (mother's and father's father) and for mother's brother. An extension of the term *ēam* from father's father to father's brother does not take place. Also father's and mother's sister are *terminologically* not equated with grandmother. It seems that the especially close connection between a mother's brother and his sister's child, a relation which is mediated by a female person, is responsible for the extension of the term *ēam* from mother's father to mother's brother. This relative is designated by a term which conveys seniority but at the same time also intimacy, because mother's father is a more closely related person than mother's brother (mother's brother can be decomposed in mother's parents' son). This arrangement can be understood within the theory of power and solidarity (Brown and Gilman 1960).

Pfeffer (1987) has tried to connect the meanings of Old English kinship terms with social rules regarding marriage.[3] Those kinship terms which denote kin-relationships, including a marriage relation, or which can be interpreted as denoting a marriage relationship (by the

[3] Benveniste also analyzed Indo-European kinship systems on the basis of marriage. As one example he uses Roman society. But a factual basis of a supposed cross-cousin marriage pattern is not existent in this society. His argumentation is twofold: Firstly *avus* as a single word is never used for mother's father. Secondly mother's father is socially unimportant and therefore the term for mother's brother cannot be simply derived from mother's father. On the basis of cross-cousin marriage, he proposes that mother's father is at the same time a mother's mother's brother and hence the derivation (Benveniste 1969: 225-229). But *avus* possess as focal kin types father's fater and mother's father (see Hettrich 1985:476 fn. 35). The word *avus* conveys seniority and closeness. This is one reason that the term *avus* is appropriate for a derivation of the term for mother's brother. The second reason is that the siblings of parents and the parents of parents are closely related in Latin kin classification which is shown by the terms *nepot* and *neptis* for the reciprocal kin types. The Roman case is presented by Benveniste (1969: 206-207) with Lycian data. His insinuation of a cross-cousin marriage pattern for this society is not supported by the cited text. This text shows that in Lycian society certain, not exactly traceable parental and nephew-niece relationships are socially very important.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

assumption of a fixed marriage rule), are crucial for him. But his interpretations of the data are so questionable that he compromises his whole analysis. Some examples of more or less crude misinterpretation follow:

> The expression *æwen gebroðor* is interpreted by him as follows: "The marker *æwe* has nothing to do with biology, its literal meaning being close to 'law' (Kluge 1967:152). In fact, the Anglo-Saxons stressed the legal ties uniting the 'parents' and not their status as genitor or genetrix." (Pfeffer 1987:117).

The sources for Old English (Wright 1884:413.29 and Miller 1890:68) suggest, however, that full-siblings are meant. Full-siblingship is placed verbally in a lawful marriage (*æwe*). The concepts of genitor and genetrix are in themselves prerequisites for legal consideration and therefore it is inapt to posit law against biology.

The word *sweor* is wrongly restricted by Pfeffer (1987:117) to cross-cousins (i.e. the children of a brother and a sister, as against the children of two sisters or two brothers). In this context Wright (1884:210.8) states: *sweor* – "consobrinus, filius patruelis". The same source presents further information about the designation of cousins in Anglo-Saxon Society: "Consobrini, i. ex. sorore et fratre uel ex duabus sororis, geswegran, geswoesternu uel gesweoras" (Wright 1884:210.5-7). Another source contains *geswiria, oððe swustur sunu* "consobrinus" (Wright 1884:365.8-9).

In Pfeffer's analysis (1987:117) a connection is provided between cross-cousins and father-in-law and this is backed up by the use of the term *sweor* for both relationships. With respect to the history of language it seems more appropriate to plead for homography or perhaps homophony: (1) *swēor* "cousin" derived from an expression which included the word for sister, as is also manifested in the expressions *geswegran, gesweosternu, gesweoas* and *geswiria* (cf. Delbrück 1890: 512); (2) *swēor* "father-in-law", connected with Germanic **swéxuraz* father-in-law (cf. Gothic *swaihur*, Old High German *suehur*, Wordick 1970:170).

Pfeffer (1987:120) claims a co-classification of mother's brother and father's sister's husband. The source cited (Schoof 1900:233) is not reliable on this point. Schoof refers to the Old English translation of *Orosii historiarum adversus paganos libri septem*, Book 1, chapter 19 and Book 2, chapters 2 and 4. In these passages *eam* denotes mother's

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

father and father's father respectively, and not *conjux amitae* as Schoof claims.[4]

In a recent article on Latin, Bush (1987:285) gives the meaning of *nepos, neptis* as "remote descending lineal ... or collateral kinsman". The term "remote" refers here to a relationship more distant than one's own child (Bush 1987:294 fn. 111). Already in an earlier article Bush (1971:423) showed that *nepos* is not only used for grandson but also for brother's and sister's son.[5] The data support the existence of this denotation up to the first century B.C. They correct the view of Szemrerényi (1977:156 fn.596; 168) and Hettrich (1985:458), who saw in the denotation brother's and sister's son a late innovation. At the same time Bush's data show the structural similarity between Latin and Old English kin-class arrangement; Rule 1 is also appropriate for Latin kin classification. He demonstrates that by the evaluation of new textual documents valuable data can be obtained. This analysis of the Old English kin-class system reveals that the search for additional data is badly needed to give a more definite description.[6]

Rules 1 and 2 can be merged. Therefore a description of this combined rule would be the most economical solution. The new rule would read as follows:

Rule 4 Let a person's sibling as a designated person when this relationship is part of a more comprehensive genealogical chain

---

[4] Book 1, chapter 19: "He þa Cirus ageaf þæm cyninge his eame ealle þa are þe he ær hæfde, buton ðæt he cyning nære; ..." (Sweet 1883:54). (Relationship of Cyrus the Great to Astyages, Cyrus' presumed mother's father). Book 2, chapter 2: "Se Procos wæs Numetores fæder / Mulieses, / wæs Siluian eam." (Sweet 1883:60). (Relationship of Rhea Silvia, the mother of Romulus, to Procras, Rhea Silvias' father's father). Book 2, chapter 4: "Swa weorðlice / swa mildelice wæs Romeburg on fruman gehalgod, mid broðor blode, / mid sweora, / mid Romuluses eame Numetores, þone he eac ofslog, ða he cyning wæs, him self siþþan to ðæm rice feng! Þuss gebletsade Romulus Romana rice on fruman : mid his broðor blode þone weall, / mid þara sweora blode þa ciricean, / mid his eames blode þæt rice." (Sweet 1883:66). (Relationship of Romulus to Mumitor, Romulus' mother's father).

[5] It would be more exact to write: for a male person's brother's and sister's son. Bush presents no examples for the respective relatives of a female person, but the data are sufficient to exclude an Omaha rule in the consanguineal domain. It may also be added that the above definition of *nepos* and *neptis* does not take polysemy into consideration.

[6] It seems also advisable to restudy the celtic and slavic data which played a supporting role for the reconstruction of an Omaha-structure in Indo-European society (cp. e.g. Friedrich 1966). The restudy should take into consideration that a male person's sister's son relationship was socially important; in the textural materials it could be expected that this relationship is represented or the more often represented than the other nephew-niece relationship.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

be regarded as structurally equivalent to that person's sibling as a designated person in a more comprehensive genealogical chain; conversely, let ego's sibling as a linking relative be regarded as structurally equivalent to ego's child as a linking person.

But as mentioned, the empirical evidence cannot be adduced with the data at hand. All rules proposed here are restricted to be inapplicable to such kintypes as cousins and parent's sibling's spouse. Since the identification of cousin-terms is a notorious problem in Indo-European, it is proposed to search not only for a solution in the direction of an Omaha-rule (or to search for special concise cousin terms), but to consider descriptive expressions for the respective kintypes in Indo-European more seriously (cp. Hettrich 1983:462). As some Indo-European languages show, descriptive expressions for cousins are a practicable way to designate cousin classes. Expressions such as *geweosternu* or *consobrinus*[7] underline not only the intimate mother-child relationship and modify a onesided picture about these societies in respect to the importance of men and women, but stress the prominence of the parental generation by using sisters as points of departure in the delineation of kinship relations for the following generation. This filiative aspect may be responsible for the established longevity of such descriptive expressions.

References

Benveniste, Émile
1969 Le vocabulaire des institutions indo-européen, Paris, Minuit. Vol. 1.
Bosworth, Joseph and T. Northcote Toller
1882 *Anglo-Saxon Dictionary*. Oxford, Clarendon Press.
Brown, Roger and Albert Gilman
1960 "The Pronouns of Power and Solidarity", in Thomas A. Sebeok ed. *Aspects of Style in Language* Cambridge, MIT-Press : 235-276.
Bush, Archie
1971 "Latin Kinship Extensions: An Interpretation of the Data", *Ethnology* 10, 409-432.
1987 "*Nepos* Again", *The Journal of Indo-European Studies* 15, 285-296.

[7] The emergence and acceptability of the term *Geschwister* in German for siblings of both sexes should be seen in conjunction with the expression *Geschwisterkind(er)* for cousin.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Delbrück, Berthold
1890 "Die indogermanischen Verwandtschaftsnamen", *Abhandlungen der Philologisch-Historischen Classe der Königlich Sächsischen Gesellschaft der Wissenschaften* 11 : 379-606.
Friedrich, Paul
1966 "Proto-Indo-European Kinship", *Ethnology* 5, 1-36.
Gates, Henry Phelps
1971 *The Kinship Terminology of Homeric Greek*. Baltimore. (Supplement to International Journal of American Linguistics, 37,4).
Hettrich, Heinrich
1985 "Indo-European Kinship Terminology in Linguistics and Anthropology", *Anthropological Linguistics* 27, 453-480.
Kluge, Friedrich
1967 *Etymologisches Wörterbuch der deutschen Sprache*. Berlin, de Gruyter.
Lounsbury, Floyd G.
1964 "The structural Analysis of Kinship Semantics", in H.G. Lunt, ed. *Proceedings of the Ninth International Congress of Linguistics*. The Hague, Mouton : 1073-1093.
1964 "A Formal Account of the Crow- and Omaha-Type Kinship Terminologies", in W.H. Goodenough, ed. *Explorations in Cultural Anthropology*. New York, McGraw-Hill : 351-393.
Miller, Thomas ed.
1890 *The Old English Version of Bede's Ecclesiastical History of The English People*. London, Trübner.
Pfeffer, Georg
1987 "The Vocabulary of Anglo-Saxon Kinship", *L'Homme* 27 (3) : 113-128.
Scheffler, Harold W.
1977 "On the "Rule of Uniform Reciprocals" in Systems of Kin Classification", *Anthropological Linguistics* 19 : 245-259.
Schoof, Wilhelm
1900 "Die deutschen Verwandtschaftsnamen", *Zeitschrift für hochdeutsche Mundarten* 1, 193-298.
Sweet, Henry (ed.)
1883 *King Alfred's Orosius*. London, Trübner.
Szemerényi, Oswald
1977 Studies in the Kinship Terminology of the Indo-European Languages, *Acta Iranica* 16, 1-240.
Wordick, Frank J.F.
1970 *A Generative-extensionist Analysis of the Proto-Indo-European Kinship System with a Phonological and Semantic Reconstruction of the Terms*. Ph.D. Thesis, The Univ. of Michigan.
Wright, Thomas
1884 *Anglo-Saxon and Old English Vocabularies*. London, Trübner. Vol. 1.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Further Observations On the Rigvedic Code

Subhash C. Kak
Louisiana State University

David Frawley
American Institute of Vedic Studies

1. Introduction

It was recently shown by one of us (Kak 1992b, 1992c) that the organization of the hymns in the Ṛgveda represents an astronomical code. Since the Ṛgveda represents the oldest book that has come down to us, the discovery of this code is of great significance for the understanding of the Rigvedic phase of the Indian civilization as well as the development of early science including mathematics and astronomy. The discovery of this code has shown that recent interpretations of the Ṛgveda have been one-sided.

The total number of hymns in the Ṛgveda is 1017 which is 339×3. It was argued in Kak (1992b) that this number represents the astronomical fact that the sun and the moon cross the sky, from rising to setting, in 339 measures of their diameters. This measure of 339 is also related to the fact that the sun as well as the moon are about 108 times their diameters away from the earth. In other words, $108\times\pi\approx339$. Since 360 is the canonical number of the year and 339 is assigned to the sun (or the space and the sky), the earth is assigned the number 21. Furthermore, the year of 366 days was divided into two equal parts of 183 days, the uttarāyana and the dakṣiṇāyana where the uttarāyana was taken to belong to the devas. Apparently, the 339 steps of the sun were now reconciled with the 183 count of the devas by postulating a space count of 78, since $339=183+2\times78$. This mapping may be seen in the Śatapatha Brāhmaṇa and also in the Vedic altars (Kak 1991). For example, the gārhapatya altar that represents the earth is surrounded by 21 stones. On the other hand, the āhavanīya altars for the space and the sky have 78 and 261 stones, respectively. The organization of Ṛgveda is replete with other astronomical numbers, which is consonant with the view that it reflects a long process of observation and development (Kak 1992a).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

To summarize the method of this research, observe that the Rigvedic hymn numbers have not been considered in isolation, although the profusion of astronomical numbers associated with the year that one finds in the book would raise the question if there existed a deliberate plan behind their choice. The hypothesis that led to the discovery of the Rigvedic astronomical code was taken from the Satapatha Brahmana itself where it is clearly stated that the Ṛgveda is to be taken as an altar of mantras (ŚB 10-4-2).

But clearly the nature of the problem implies that conclusive proof of the decipherment of the code cannot be provided by the Ṛgveda itself. The validation for the decipherment is provided by a series of interlocking pieces of evidence at different levels.

This paper present further interpretation of the Rigvedic code which is validated by the literary evidence from the Ṛgveda and other early Indian literature. In particular, we argue that the code may be interpreted to imply the Rigvedic hymns were written in the geographical region of the Sarasvati valleys. These arguments further strengthen the interpretation of 339 as the number of sun or moon-steps.

2. The Code

The Anukramaṇīs ascribe books 2 to 7 to the ṛṣis Gṛtsamada, Viśvāmitra, Vāmadeva, Atri, Bharadvāja, and Vasiṣṭha or their families. Book 9 is a collection of hymns by several rsis to Soma Pavamāna, or Soma poured through the filter. Book 1 which consists of 191 hymns is classed into 15 groups of hymns by different seers. Book 10 also consists of 191 hymns and its first 84 hymns are classed into 25 groups based on ṛṣis, and its remaining 107 hymns are counted singly.

The classification of the family books 2 to 7 is based on hymns to different gods and these groups are 5, 4, 11, 7, 5, 12 respectively. Book 8 hymns are grouped according to the particular seers of the Kaṇva family. Including the Vālakhilya hymns these constitute 19 groups. The hymns of Book 9 are grouped into 7 according to the metre. These metres are Gāyatrī, Jagatī, Triṣṭubh, Anuṣṭubh, Uṣṇnih, Pragātha, and miscellaneous. These hymns are by a host of ṛṣis including Bhṛgu, Kaśyapa, and Kavi Uśanas. This information is summarized in Table 1.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

TABLE 1: Hymns and Groups

Mandalas	1	2	3	4	5	6	7	8	9	10
Hymns	191	43	62	58	87	75	104	92	114	191
Groups	15	5	4	11	7	5	12	18	7	25+107

When the Ṛgveda is considered akin to the five-layered altar described in the Brāhmaṇas (Kak 1991) then the first two books should correspond to the space intermediate to the earth and the sky. Now the number that represents space is 78. When used with the multiplier of 3 for the three worlds, this yields a total of 234 hymns, which is indeed the number of hymns in these two books. The Rigvedic books were shown as a five-layered altar of mantras in Kak (1992b).

This arrangement may be represented by the book sequence

2-1 3-4 5-6 7-8 10-9 [Altar 1]

in the five layers courting from bottom up and left to right. The choice of this arrangement was prompted by the considerable regularity in the hymn counts as seen by considering Table 2.

TABLE 2: Hymns in Altar 1

191	114
104	92
87	75
62	58
43	191

Thus the hymn count separations diagonally across the two columns are 29 each for Book 4 to Book 5 and Book 6 to Book 7 and they are 17 each for the second column for Book 4 to Book 6 and Book 6 to Book 8. Another regularity is that the middle three layers are indexed by order from left to right whereas the bottom and the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

top layers are in the opposite sequence.

Furthermore, Books [4+6+8+9] = 339, and these books may be taken to represent the *spine* of the altar. The *underside* of the altar now consists of the Books [2+3+5+7] = 296, and the *feet and the head* Books [1+10] = 382. The numbers 296 and 382 are each 43 removed from the fundamental Rigvedic number of 339.

Now we investigate the other natural choices for comparison. Based on considerations of symmetry, these choices are:

1-2 3-4 5-6 7-8 9-10 [Altar 2]
1-2 4-3 5-6 8-7 9-10 [Altar 3]

Altar 2 has the books arranged in the same order across the layers, whereas Altar 3 has the books arranged in alternating order across the layers. Altars 2 and 3 yield the following set of numbers for the *underside*, the *spine*, and the *feet and the head*.

268 367 382 [Altar 2]
284 351 382 [Altar 3]

These numbers have no apparent order which leads one to conclude that Altars 2 and 3 were not the actual designs.

3. Sun-steps During the Solstices

We return to a further examination of the numbers 296, 339, and 382 in the design of Altar 1. We propose that since 339 has an obvious significance as the number of sun-steps during the average day or the equinox, the other numbers are likely to have a similar significance. We suggest that 296 is the number of sun-steps during the winter solstice and 382 is the number of sunsteps during the summer solstice. The background to the determination of the solstices in given by Sengupta (1938).

Let us evaluate this proposal. Since the number of sun-steps represents the length of the day, we have a ratio for the longest to the shortest day which is equal to 382/296 = 1.29. We know that the hymns of the Ṛgveda were composed in the region of the Drishadvati and the Sarasvati rivers which flowed in the latitudes of 30° to 22°. If we accept the tradition that Kṛṣṇa Dvaipāyana Vyāsa arranged the hymns into the current form, then again we must accept the same region for his work. Now the question arises whether these facts square

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

up with our interpretations of the numbers 296 and 382.

The length of the day varies with the latitude. If θ is the latitude of the place of observation and ϕ is the inclination of the earth's axis to its orbit, then the ratio R, the duration of the longest day divided by the duration of the shortest day, for a spherical earth on a circular orbit and without an atmosphere is given by:

$$R = \frac{\cos(\theta-\phi)}{\cos(\theta+\phi)}$$

This figure needs correction because of the flattening of the earth and since refraction causes the sun to rise earlier and set later than it would if the earth had no atmosphere. This refraction causes the duration of daylight to be extended by about 6 or 7 minutes at the expense of the duration of darkness. This necessitates a correction of about 2°'s from the value obtained by Eqn (1).

Now consider ϕ, the obliquity of the ecliptic. Although its current value is about 23.5°, it is believed to vary slowly between about 24° and 22°. According to one estimate (Kulikov 1973) it changes about 47 seconds in a century. Considering that the settlements on the Sarasvati were in their golden age in the third millennium B.C.E., a further error of about 1° could have been caused by changing ϕ.

Considering refraction effects one obtains a value of $R = 1.2929$ for the latitude of 22° (Waugh 1973). With a further correction for ϕ and noting that it might have been smaller than the current value, this value can be revised to about 23°.

The latitude of 23° passes through Gujarat close to where Sarasvati would have emptied into the sea.

Note that Lagadha in the Vedāñga Jyotiṣa speaks of the ratio of the longest to the shortest day being 1.5 (Sastry 1985). After corrections are made this corresponds to a latitude of 34° which is correct for Northwest India to the north of the Sarasvati valleys. Since Vedāñga Jyotiṣa was composed after the early Rigvedic age when the focus of the civilization had passed east to the Yamuna-Ganga region and west to upper Indus region, the figure of 34° accords with this sequence.

4. Observation and Theory During the Rigvedic Times

If one accepts the interpretation of the Rigvedic code sketched above, two further possibilities need to be examined. Was the ratio of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

382/296 a precise value reflecting the region where Sarasvati met the sea or was the value obtained after adjustment made in consonance with a theory?

We speculate that the figure may have been arrived at indirectly in the following fashion. TS 7.2.6 speaks of how the seasons were born of the *Ekādaśarātra* rite. Now the birth of seasons implies a shortening and lengthening of days. For two such rites at the two solstices leaves us with a total of 366-22=344 days. From the winter to the summer solstice this implies a total of 172 days. Since the lengthening was a total of 86 sun-steps, a growth of half a sun-step each day must have been assumed. If this is what happened then the latitude of 23° that we arrived at could only have been a rough value and any of the general region of the Sarasvati valleys could have been implied. Note also that a linear model of shortening and lengthening of days we assumed in Vedāñga Jyotiṣa as well.

To return to the Rigvedic code, it appears that the primary number must have been the figure of 339 from which the other two numbers were derived by subtracting and adding 43. The number 339 could have been found through a geometric construction once the distance that the sun is 108 sun diameters away from the earth was agreed upon. Certainly, all these numbers would have been checked through independent measurements.

Note also that the figure of 339 could be measured at day or night by determining the sun or moon-steps over a certain arc. Such a process would have required time-keeping and if water clocks were used then the temperature variation over different parts of the day and night would introduce errors. The progress of time during night could be measured by the nakṣatras rising in the night sky but again refraction and flattening of the earth would introduce errors.

5. Concluding Remarks

The continuing analysis of the Rigvedic code stresses that the one-sided interpretations that have become popular in academic circles are deeply flawed. To understand the Ṛigveda one needs to analyze it at the *ādhibhautika, ādhidaivika*, and the *ādhyātmika* levels.

Traditionally, astronomy in India has been related to the Bhṛgus, one of the most important of the Vedic sage families. Most notably the figure Śukra Bhārgava appears to be the eponym for the planet Venus. The site most specific to the Bhṛgus is the city of Bhṛgukaccha (modern Bharuch). Later astronomical traditions of India were

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

centered nearby in Ujjain, which was marked as the prime meridian. Dvārakā is also in the same general area; this is the city of Krishna in whose time the Vedas were compiled according to tradition. The calculations of this paper could be taken to reflect the varying lengths of the day in this region. Latitudes for the prime sites in this region are:

Bhṛgukaccha (Bharuch): 21° 47′
Dvārakā (Dwarka): 22° 18′
Ujjain : 23° 9′

Consider now the five sons of the great Vedic king Yayāti, an early descendent of Manu in the Puranic king lists, from whom are derived the five main branches of the Aryans in India. Two of these sons are related to the Bhṛgus through Devayānī, the elder of the two wives of Yayāti, who was the daughter of Śukra Bhārgava. These two sons are Turvaśa and Yadu. The Yadus are related to the region of Gujarat, which they ruled.

We conclude there is ample historical and astronomical basis to view Gujarat as a prime center of astronomical knowledge in Vedic times, although the Rigvedic code data could as well apply to the Sarasvati valleys further north. Our analysis indicates provenance for the Ṛgveda that agrees with literary evidence and this provides further validation for the decipherment.

References

Kak, S.C.

1991 "Astronomy in Śatapatha Brāhmaṇa", *Proceedings of the International Symposium on Indian and Other Asiatic Astronomies*, Hyderabad, December 12-16. Also to appear in *Indian J. of History of Science*, 27 (1992).

1992a The Indus Tradition and the Indo-Aryans. *Mankind Quarterly*, 32, 195-213.

1992b The architecture of the Ṛgveda *Technical Report, LSU*, May 5.

1992c The Astronomy of the Vedic Altars and the Ṛgveda. *Mankind Quarterly*, 33, 43-55.

Kulikov, K.A.

1956 *Fundamental Constants of Astronomy*. Jerusalem.

Ṛgveda

Ed., with the commentary of Sāyaṇa, M. Müller. London, 1890-92. Trans. K.F. Geldner *Der Rig-Veda*. Cambridge, 1951.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Sastry, T.S. Kuppanna
1985 *Vedāṅga Jyotiṣa of Lagadha*. New Delhi: Indian National Science Academy.

Śatapatha Brāhmaṇa
Ed., with the commentary of Sāyaṇa, A Weber. Calcutta, 1903. Trans. J. Eggeling. Oxford, 1892-1900; rep. Delhi, 1969.

Sengupta, P.C.
1938 "Solstice days in Vedic literature", *J. Royal Society Bengal Letters* 4, 415-434.

Taittirīya Saṃhitā
Ed., with the commentary of Mādhava. Calcutta, 1860-99. Trans. A.B. Keith. Cambridge, 1914; rep. Delhi, 1967.

Waugh, A.L.
1973 *Sundials: Their Theory and Construction*. New York.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"For Purusa's Sake": Psychoanalytic Self Psychology and the Metaphysics of Selfhood in Indian Thought: Parts II and III

Alfred Collins
135 Christensen Dr., Anchorage, Alaska 99501

Part I of this article (*Mankind Quarterly* 32, 19-42) laid out the aim of viewing three "schools" of Indian thought in terms of *self psychology*, a version of psychoanalytic theory developed by Heinz Kohut (1977, 1984) and modified to fit the Indian context (Collins and Desai, 1986; Collins, 1991). Kohut's key insight was to understand relevant parts of the world as *selfobjects*, i.e., objects that enhance, generate or support a sense of selfhood. For Kohut, the search, through selfobjects, for selfhood is the basic motivational principle in fully human life (the libidinal and agressive drives are seen as partial and subsidiary). The Sāṅkhya philosophy was then discussed in Kohutian terms, with *prakṛti* being viewed as a selfobject to *puruṣa*. The aim was to understand a relationship between these two fundamental Sāṅkhyan principles denied or unintelligible in the theory itself. Part III will treat some ideas from Kashmiri Śaivism in the same terms. The present section of the work discusses the thought of the Vedantin theologian Rāmānuja.

Rāmānuja's Viśiṣṭādvaita

Historically, the Sāṅkhya system preceded and is generally acknowledged to have strongly influenced development of the Vedānta philosophy (Potter, 1981: 20). Unlike Sāṅkhya, the Advaita branch of Vedānta has only one ultimate principle, the *brahman*, which corresponds roughly to Sāṅkhya's *puruṣa*. The material world does not exist as such in reality, and its appearance is the product of *avidya*, "ignorance." Advaita thus claims that in reality something like *puruṣa's kaivalya* state has already been reached (or more accurately has never been lost); because of the "illusion" (*mzyz*) of a world, personality etc. created by *avidya* "we" do not recognise this fact. But the Advaita equivalent of *kaivalya* is not in any sense "separate" from the world: the world's nature is nothing but the *brahman*.

From a selfobject perspective, Advaita seems to have dissolved the selfobject in the self, leaving the self's environment totally without

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

reality or value, and the self in a state of grandiose "inflation." This extreme position effectively undermines the old cosmogonic selfhood, and its "developmental" model of descending and ascending phases, which is preserved in the prakṛtic aspect of Sāṅkhya.[1] A corollary is that the worship of gods such as Śiva and Viṣṇu loses meaning, since this worship (*bhakti*, etc.) involves an ascending development of the person towards the deity.[2] Against this non-theistic viewpoint arose within Vedānta the school of *viśiṣṭādvaita* ("the nonduality of qualified or differentiated beings," Lipner, 1986: 142), created principally by Rāmānuja, a south Indian Śrīvaiṣṇava Brahman in the 11th century CE. In self psychological terms, Rāmānuja returned some measure of selfobject reality to the world, and development to the self, while retaining Śaṅkara's exalted vision of selfhood (now located preeminently in the god Viṣṇu [Nārāyana], the deistic form of *brahman*).

Rāmānuja's thought is, as van Buitenen has noted (1956a: 16), quite "Sāṅkhyan." Individual selves (*jīvātman-s*, corresponding to Sāṅkhya's individual *puruṣa-s*) are ultimately real, as is the prakṛtic ("material") world. Contrary to classical Sāṅkhya (but perhaps in accord with an earlier, deistic *Sāṅkhya*) both selves and their bodies, as well as the rest of the world, are created by God (Viṣṇu, Nārāyana or *brahman*).

The relationship between *brahman-Nārāyaṇa* and the individual self (*ātman* or *jīvātman*) is simultaneously one of a parallelism of similar natures on different levels (so that the analysis of one often applies to the other [cf van Buitenen, 1953:2; Lipner: 81, 139]) and of the creation and "embodiment" of the *ātman* by Brahman[3] (van Buitenen,

---

[1] It could be argued that the old developmental myth is maintained in the structure of avidya, for example in the theory of the four parts of *oṁ* in the *Māṇḍukya Upaniṣad* and *Gaudapāda kārikā*: in ascending order we have the waking state and its world of experience (*viśva*), the dream state (*taijāsa*), and deep sleep (*prajña*); the "fourth" (*turīya*) is not really part of the development. As we rise from *viśva* to *taijāsa* to *prajña*, the distance between the self and its objects lessens (see Potter, 1981: 106): in *viśva* the objects are truly objective, in *taijāsa* they are "self luminous" (*svaprakāśa*, implying no need for external "energy" to make them shine in consciousness); in *prajña* objects are merged into a "mass of consciousness."

[2] In practice the old view remained very much alive in Vedantic *āśrama-s*, especially in the *guru*-disciple relationship (cf Babb, 1986) where the guru took over the role of the god.

[3] Brahman will be used rather than *brahman* since for Rāmānuja Brahman is the "personal" ensouler of the world, rather than pure consciousness.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

1956a: 189; Lipner: 85). We will see that the connection – and inherent tension – between these two sorts of relationship is at the nub of Rāmānuja's theory.

Rāmānuja's cosmogony, as we noted, is Vaiṣṇava: in the beginning *Nārāyaṇa* emits the cosmos from himself, via a "continuous flow of being ... in one direction only" (Lipner: 84). Even after creation (emanation), *Nārāyaṇa*-Brahman maintains an ontologically supportive relationship with the cosmos, a sort of "existential 'umbilical cord'" (Lipner: 83). The process of emission/support can be viewed under many aspects, of which two of the most important are consciousness and language. Thus Nārāyana, who is by nature endowed with the Vedic texts, extracts the Vedic words and makes manifest their meanings/objects (*artha*). These objects "find their fulfillment in the Supreme Self" [i.e. in Viṣṇu] both when they dissolve back into him at the end of the cosmos (*pralāya*), but also at every moment via the "existential umbilical cord" (Lipner: 21). Using concepts which we found helpful in discussing Sāṅkhya, we will speak of Brahman's emission and resorption of the cosmos as the "diachronic" dimension of the Brahman-world relationship, and their tie through the "existential umbilical cord" as the "synchronic" dimension.

A theory of meaning and a cosmogony are inseparable in *Rāmānuja's* thought: by uttering the Vedic words *Nārāyaṇa* manifests the things which the words denote; "the Vedic word has an innate denotative power demanding fruition in the ultimate production of real things" (Lipner: 21)[4]. But the creation of entities meant by words is only the first half of their trajectory of being, for they (words and things) return in the end to (and are always supported by) their source, *Viṣṇu* (or Brahman).

In the later upaniṣads[5] and in Advaita Vedānta the sacred syllable *aum* (*oṁ*) images this unity of word and thing; *aum* represents the

---

[4] Perhaps this is easier to imagine in a "Sāṅkhyan" environment. As Larson notes [Larson and Bhattacharya, 1987: xi], Sāṅkhyan ideas form a cultural "code" in classical India, and are imported into virtually every realm of discourse. In Sāṅkhya, words – a kind of "mental" substance – are not essentially different from things – "material" substances. Thus words need not call things into existence in some mysterious way; rather they could develop into them by *satkārya*, just as the *buddhi* eventually evolves (via *ahaṁkāra*, etc.) into the objects of perception.

[5] For a discussion of the older cosmogony of "speech" (*Vāc*), particularly of the "syllable" (*akṣara*), and preeminently of the syllable *om*, see van Buitenen (1957a, 1959).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

whole of language and its three constituent phonemes signify the states of waking, dreaming and deep sleep, as well as the objects one experiences in each. In the *Māṇḍukya Upaniṣad* and *Gaudapāda Kārikā* (a primary source of Advaita Vedānta), *auṁ* is identified with the self (*ātman*) which has three "parts" corresponding to the three states and their respective worlds. Beyond its three states of being, the self is spoken of as having a "partless" (*amātra*) aspect, called *turīya*, the "fourth" (Potter, 1981: 89, 312). The *ātman's* "states of consciousness" are manifest in uttering *auṁ*; but in the end they are absorbed in the *prajñā* (dreamless sleep). The *ātman* itself, which from this point of view is *turīya*, remains over. Rāmānuja reinterprets this Advaita analysis by identifying *auṁ's* initial sound "*a*" with *Nārāyaṇa*, who is thus the source and place of final merger of the Vedic words and the world (analogous to prajñā). In this analysis there is no *turīya* or other state beyond the world. Rāmānuja's concept of the "parts" (*aṁśa*) vs the "part-possessor" (*aṁśin*), however, does capture the same idea as the *turīya* aspect of *auṁ*: as the emanator of the cosmos, *Nārāyaṇa* is the *aṁśin* of the world, and remains beyond the world (though as its support) until it merges into him at the End (Lipner: 86).

Just as the god Vṣṇiu intrinsically contains (the sacred, Vedic) language which when uttered naturally produces the world, so too does the individual ātman (*jīvātman*) possess *consciousness*, which has a similar way of expressing itself.

> Consciousness is the way of the *ātman's* self expression; consequently it enjoys a *sui-generis* relationship with the *ātman*. As constituting the *ātman's* essence, it exists substantivally; as separate acts of consciousness characterising and flowing from the *ātman*, it acts attributatively....The *ātman*...is a center...of conscious acts radiating out and terminating in their objects. (Lipner: 52).

Although for Rāmānuja the individual *ātman-s* are not identical with Brahman-Nārāyaṃa, and do not emit their objects, there is a parallel in the area of consciousness such that Brahman's creativity involves seeing and being conscious of what it "creates;" as with the *ātman*, consciousness "flows" or "radiates" towards its object, the thing being (in Brahman's case) simultaneously known and created.

> Our earlier observation about the *sui generis* relationship between the *jīvātman's svarūpa* and its definitional qualities applies, *mutatis mutandis*,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

> to the relation between Brahman's *svarūpa* (*sensu stricto*) and its essential qualities. Also, as for the *jīvātman*, for Brahman or the supreme Self (*paramātman*) too, knowledge (in its infinity and absolute purity) may be said to be the defining characteristic....(Lipner: 81).

For Rāmānuja, the world is Brahman's emanation and his body; its "parts" (*aṁśa*) are his parts, for he is the *aṁśin*, or "parts possessor;" similarly the world is his body (*śarīra*) and he is the *śarīrin*, or "owner of the body." Lipner lists several other terms expressive of this relationship: "support"-"thing supported" (*adhāra-adheya*: 124), "controller"-"thing controlled" (*niyantṛ-niyamya*: 129), "mode possessor" and "mode" (*prakārin-prakāra*: 45), and "principal"-"accessory" (*śesin-śesa*: 131). Following the previous discussion, we can also say that Brahman is the knower and the world the known; and that Brahman is the "speaker" or "utterer" and the world what is uttered. In all these ways of looking at the Brahman-world relationship, there is a balance between seeing the world as only a transformation of Brahman's substance, and viewing it as separate from Brahman (although effected by him).[6]

Unlike Brahman, the personal *ātman* is limited to a particular segment of embodied reality. Aside from this apparently quantitative difference, the parallels between Brahman and the *ātman's* essential nature are close: like Brahman, the *ātman* is inherently conscious and blissful (Lipner: 139), and embodies its acts of consciousness; as the Brahman is the *aṁśin* or "part possessor" of the universal "body," so the *ātman* is the *aṁśin* of its limited body (Lipner: 86).

The fundamental difference between Brahman and *ātman* is that the personal *ātman* is usually implicated in *karma* (action undertaken for the purpose of experiencing a certain "fruit") while Brahman never

---

[6] It is as if Rāmānuja's Brahman "simultaneously" emanates and supports the cosmos, never losing touch with his creation. In the old Vedic cosmogony (Collins and Desai, 1986) Prajāpati (the Cosmic Man) falls apart into the cosmos which he emits; Brahman, on the other hand, seems to be caught at the moment of falling into the world, never quite going over the edge. Hence the developmental (diachronic) model of the cosmic emanation is treated as structural (synchronic) in Rāmānuja: Brahman controls, possesses, and ensouls the world, all at the same "moment." Compared to the older model, Rāmānuja emphasizes even more the "sameness" of creator and world, although in the specific case of his creation of the personal *ātman-s* (as we will see) this is problematic. For an analysis of the same issue in Vedic times, under the rubrics of *jami* ("excessive sameness") and *pṛthak* ("excessive difference") see B. K. Smith, 1989.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

is. The karmic distinction also entails a difference in temporality: while the Brahman is related "simultaneously" (synchronically) to all parts or aspects of his "body," the *ātman* is successively (diachronically) associated with its "lineage" of karmic bodies. To clarify the differences let us look at *Rāmānuja's* description of Brahman's creation of the personal *ātman*:

> Sometimes [i.e., after creation] his [Brahman's] body consists of gross conscious and non-conscious being separated out into name and form.... The conscious part [i.e., the *ātman*], in order that it may become the [embodied] experiencers [*bhoktṛ*] of particular karmic fruits, undergoes a change in the form of expansion of knowledge in accordance with [the individual requirements of] the experiencing-condition. (Lipner: 85, translation from *Śrī Bhāṣya* 2.3.18).

Although it is not strictly part of their essential *nature* to do so, *ātman-s* generally pursue goals which they perceive as in their (limited) self-interest. The "fruits" (*phala*) of these acts are experienced as pleasurable or painful, often in future lives. Thus are generated new, more or less different conditions within which the *ātman* finds itself. All such limited conditions contain a specific nature (*dharma*)[7], and actions within the "definition" of that nature do not generate new *karma*. It is only actions undertaken for the sake of new "fruits" (to improve one's condition, make it more pleasurable, etc.), that generate *karma* and change one's nature (*dharma*). The usual mode of being of human *ātman-s*, then, is a karmic trail of diverging *dharma-s*, as the pursuit of self-interest paradoxically brings about repeated (but partial) loss of the particular, personal self one was.

There is clearly a similarity between Brahman's creativity and "umbilical" connection with his world, and the karmic "creativity" of the *ātman*, which brings about a later (state of the) *ātman* developed from an earlier one. Both cases involve a "narcissistic" bond between

---

[7] This interpretation of *dharma* is near the Sāṅkhyan concept of the *liṅga* ("marked core," Larson, 1980) or *liṅgaśarīra*. Larson interprets the *liṅga* as determining the "given" situation of a person in a particular life, while the experiences and choices of that life (which he calls the "*bhāva*"-level) affect future states of the *liṅga*. Thus, "in any 'dividual' life there is a deep-structural 'marked core' (*liṅga*) which determines the place of the 'dividual' life in the hierarchical scheme of things, and there is a surface-structural 'projecting' or experiencing ... which generates traces or further residues that will accrue to the 'marked core' and in turn determine the future placement of the *liṅga*." (Larson, 1980: 313).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

cause and effect, a continuing inherence of the cause in the effect.[8]

A necessary but not sufficient condition for the difference between Brahman and the *ātman-s*, and the origin of *karma*, seems to be the limitedness of the personal *ātman*. Being confined to a particular body, time, social *milieu*, etc. the *ātman* sees only some parts of the Brahman's creation. This makes it possible for the *ātman* to focus itself (its attention) on those parts of its experience where it feels a sense of limitedness or narcissistic incompleteness, obsessively seek to relieve the trauma, and thus generate new *karma*. The notion of *dharma*, on the other hand, implies that at any given moment an *ātman*, although limited, has potentially a relatively *whole* body-experience to which it is related in a manner similar to Brahman's relationship with his world-body. That is, the *ātman* is the "embodier" and "controller" of its dharmic nature. *Karma*-generating action, then, would be action resulting from the *ātman's* narcissistic attachment to (embodying of) a part only of its dharmic endowment.[9] In terms of self psychology, the *ātman's* dharmic nature (at a given moment) is similar to a healthy, relatively inclusive nuclear self, while *karma*-generating action is like the unconstrained expression of particular, "dissociated" instincts;[10] *karma*,

---

[8] Note the similarity between Lipner's metaphor of the "umbilical connection" and Freud's (1914) image of narcissism as like a "pseudopod" extended out of its body by a microorganism.

[9] The image of "godly" (*daivic*) and "demonic" (*asuric*) qualities and men is relevant here. *Rāmānuja* in the *Gītābhāṣya* (4.1-3; van Buitenen, 1953: 155-158) describes behavior compatible with the interests of the *ātman* as daivic, while asuric behavior destroys the *ātman*. Asuric behavior presupposes an inflated view of the powers of the individual: e.g., the belief that the world is caused by oneself or one's desires, that God does not exist, that one is independent and lord over others, that one's power, success, happiness and wealth are entirely due to one's own efforts, etc. The frequent, and ironic, result of this grandiose attitude is that one's actions are cut off, unfinished, by death. The implication is that asuric action is inherently incomplete; likewise, its motives: desire, anger and greed. Death demonstrates the incompleteness. One's wholeness – one's true, dharmic nature – is realized only in daivic action; for *Rāmānuja*, this means in *bhakti*. While the daivic attitude leads to *mokṣa*, it also leads to an auspicious life (*abhyudaya*), i.e., to the relative wholeness of the personal *ātman* properly served by body and mind.

[10] Lipner discusses *dharma* in terms of the self's control of the body: "the ideal... is a fully integrated control between self and body in the latter's different functions and aspects" (1986: 130). In the case of the nuclear self this does not mean that the self is without goals in its control of the body; indeed the nuclear self is essentially a goal-centered structure, being organized around ideals and ambitions (Kohut, 1978). But there is a certain, if partial, wholeness to the nuclear self such that a life lived according to its "blueprint" ends with relatively few karmic "loose ends." There is also a completeness at all moments of the nuclear

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

on this analysis, would be a "breakdown product" of the partially fragmented *ātman* rather than its inherent nature.[11]

But this conclusion raises questions regarding the Brahman's own creativity: Are the personal *ātman-s* only "breakdown products" of the Brahman? That is, if Brahman is the simultaneous ensouler of the entire world, what is the point of his emitting particular *ātman-s* in the first place? Does it not imply a need on his part? *Rāmānuja* tries to avoid this difficulty by positing that already at the moment of Brahman's creation of the world he "remembers" the karmic traces of *ātman-s* in previous cosmic eras. But this simply pushes the question into an infinite regress. That the *actual* world (particularly the human world) is a sort of breakdown product is strongly suggested by many aspects of the Vaiṣṇava religious culture within which Rāmānuja lived. For example, the doctrine of dharmic decline with time (the *yuga* theory) is specifically Vaiṣṇava, and is associated with the *avatara* theory of Nārāyana's descent into the human world to reestablish *dharma* (reverse the breakdown). But is Brahman fragmented by his production of *ātman-s*? Clearly this is not so at the "conscious" level of Rāmānuja's thought, but a danger to Brahman's integrity does seem implied by the *ātman*-Brahman parallel.[12]

---

self, because its goals are not motivated by grandiosity or narcissistic insufficiency. This analysis suggests a reinterpretation of the Bhagavad Gītā's admonition to act only "for the sake of *dharma*" and never "for the fruits of action." "Fruits," that is, may be defined functionally rather than empirically as "satisfaction of a split-off, narcissistically cathected desire" (and not simply as "anything sought"). In this way we can view desires which are part of an integrated nuclear self, i.e., a dharmic nature, as not entailing much new *karma*. Farther on this continuum, the *jīvanmukta's* desires, being totally integrated, do not count as (separate) desires at all.

E.g., in the *Yogavāsiṣtha* (5.50.75) Rāma is told by his guru *Vasiṣtha* that he is now a *jīvanmukta* and, having "crossed to the far shore of *saṃsāra*," should "drink, live, make love" (*piba vihara ramasva prāptasaṁsārapāraḥ*; translation from Masson and Patwardhan, 1985:31).

[11] Kohut's metaphor of "tragic man," i.e., man as facing his essential and impossible task of being a self, is relevant. The "tragedy" is man's ultimate incapacity to be what he essentially is; i.e., the inability of the actual nuclear self to be the whole self which a man is. The nuclear self is never quite complete, never totally satisfied to be what it is, but is always partly caught in "*karma* generating" acts that aim to glorify one aspect or another of the nuclear self, but which at the same time alter its nature. In this way, the self is always more or less "fragmented" (in a milder way in "normal" persons, pathologically in psychiatric cases, minimally in the wise).

[12] The danger posed to the ultimate by the defects of a creation with which it maintains an "umbilical tie" is a constant concern in Indian religion and philosophy. As Potter (1963:

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Ātman, Brahman and the World

There are three areas where we might expect to find self-selfobject relationships on *Rāmānuja's* theory: 1) in the relationship between Brahman and the world, 2) between Brahman and the human *jīvātman*, and 3) between the *jīvātman* and the body, mind and world of human beings. The first and third are likely to be similar, due to the Brahman-*ātman* parallelism. In fact, it is easier to see how the "world" functions as a selfobject for the personal *ātman*. As Lipner says (127) "the body. . . exists to serve the *ātman's* ends: first, the outworking of its *karma*; finally, its liberation." The body, then, is an "environmental" selfobject for the *ātman*. Since Brahman has no karma, and no need for liberation, it is not so easy to see how the world can serve his ends.

Let us represent a particular *ātman's* "karmic trail" as follows ("Devadatta" represents the *jīvātman* of the man who is Devadatta).

"Devadatta" at Time 1		"Devadatta" at Time 2
person (dharmic entity) # 1 becomes attached to desire # 1	this generates *karma* # 1	causing development into person (dharmic entity) # 2
"Devadatta" at Time 3		**"Devadatta"at Time 4**
person (dharmic entity) # 2 becomes attached to desire # 2	this generates *karma* # 2	causing development into person (dharmic entity) # 3

Treating these "dharmic entities"[13] as analogous to Kohutian "nuclear

---

156) says in a Vedantic context, "One must conclude that Brahman is itself infected with the very evils of bondage which infect its constituent factors, since they preexist in Brahman." He adds (162) that the illusion (*vivarta*) theory supplanted the earlier developmental (*pariṇāma*) theory in Vedanta "to avoid visiting the stable relatum in a dependence relation with the defects of the unstable one."

[13] A "dharmic entity" is a particular body ensouled at a specific time by the *ātman* in question. Lipner (129) discusses this in terms of "correlative predication," a logical way of expressing "identity-in-difference." For example "Devadatta, owing to bad *karma*, *is* an *ox* (in this life);" the copula expresses the fact that it is the same Devadatta (i.e., the same *ātman*) who is now the ox but was formerly the man Devadatta. A given *ātman* may be associated

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

selves," we will denote them as S (particular nuclear self), with K denoting *karma-s*. Schematically, S-1 → K-1 → S-2 → K-2 → S-3 .... *Karma-s* produce new, more or less different "dharmic entities," which in turn become attached to specific "desires," thus generating new *karma*. Note that what we have called "desires" are simply specific elements of the body-mind-world complex that the self "embodies" at a particular moment; the problem is that these elements have gotten out of hand, taken on exaggerated importance, and are obsessively pursued.

The *jīvātman* at the moment of association with a particular "body" (understood broadly as also including mental and environmental factors) has a basic "choice" between creating new *karma* and working out the old *karma* which forms its present *dharmic* nature (body); correspondingly, it has two possible types of selfobject relationship. New *karma-s* arise from obsessive attachment to particular unfulfilled desires the realization of which seems essential to the dharmic entity's "grandiose" sense of itself. I.e., *karma* arises in projecting new (potential) selfobjects from the self. But accepting oneself as "given," i.e. "following one's own *dharma*," is also motivated by selfobject concerns, in this case the selfobjecthood of one's dharmic body. As Lipner (130) notes, "the body, by acting out its 'natural' function, ... i.e., by being what it is, 'glorifies' or expresses in some way the superiority of its self." The *dharmic* self allows this, just as *Nārāyaṇa* "allows" men and the world to glorify him.

Acting dharmically, then, is to allow the "body" to glorify — in Kohut's terms this would be to "idealize" and also to "mirror" — the self. We have seen that the environment also pays homage to the human self. As Lipner expresses the matter:

> [The human body] is best suited to glorify, to 'set off,' the jewel that is the inner spirit. This the body does when its multifarious deeds and capacities are allowed to be transparent to the cultivated spiritual beauty of the soul within .... Further, in so far as the whole inanimate world may be regarded as an 'extension' of the human being which grows and develops as the being it is by living in, manipulating and assimilating the world, the

---

with a theoretically infinite number of "dharmic entities." Each dharmic entity possesses a (potential) "wholeness" (*dharma*) guaranteed by its being ensouled or "controlled" by its indwelling *ātman*.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

> human person becomes the summit of visible creation .... The world is given a value ... in so far as it furthers the growth and ends of the human person (133).

The world, then, like the body (or as part of the "body"), is a selfobject for the *ātman* who follows his *dharma*.

If, however, the *ātman* seeks new pleasures via *karma*-creating projections, the actual result is a deficient self-selfobject relationship. In projecting out unintegrated "desires" the self "unmatches"[14] a part of itself from the remainder; *karma* expresses the self's (hopeless) tendency to "catch up" to its unmatched piece in order to become reintegrated.[15] From the perspective of the whole self, however "desirable" the projected selfobjects are, they are still felt in a way as unsatisfying and "bad."[16]

Just as the created entities of the world "find their fulfillment in the Supreme Self" (diachronically at the end of the *kalpa* and synchronically in *Nārāyaṇa's* "principal" aspect by "glorifying" him) so do the *ātman's karma*-generated "bodies" find their fulfillment through their dharma in a future life (or later in this one).

As suggested above, the Brahman-*ātman* parallel can be viewed in either direction: on the one hand, *ātman* could be seen to have a synchronic aspect like the Brahman, implying that its *karma*-s always "glorify" the self; on the other hand, like the *ātman*, the Brahman might (during the era of the world's manifestation) seem unmatched from its created "body." In selfobject terms, if the *ātman* (Brahman) can be seen as the "refuge" of the selfobject, the latter is felt as a "good" mirror to the self; if it appears to be something as yet unobtained, the selfobject fragments the self and is felt to be "bad."

The possibility of a resolution of this uncertainty may be sought in a selfobject perspective on the *ātman*-Brahman relationship. If the

---

[14] The term *unmatching* is taken from McKim Marriott (1989).

[15] This is expressed in a famous myth from the *Bṛhadāraṇyaka Upaṇṣad* (1.4.3-4): the Cosmic Man (Puruṣa) emits a woman as his other half, but she flees from him (apparently from fear of incest); he pursues her, but she changes into animal form; Puruṣa assumes the same form and mates with her, but she flees again, into another form, and the pattern repeats.

[16] W.R.D. Fairbairn's psychoanalytic object relations theory similarly distinguishes what he calls the "exciting object" from "ideal" (i.e., gratifying) and "rejecting" objects; exciting objects are "promising and enticing," but ultimately unsatisfying. (Greenberg and Mitchell, 1983, 164)

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"body" "glorifies" the *ātman* (diachronically), and the world similarly "glorifies" Brahman (synchronically), it is also true that the same kind of relationship essentially exists between the *ātman* and Brahman: the *ātman's* nature is to "glorify" Brahman. We have seen that "glorification" involves a mirroring relationship, so in this case the *ātman* would mirror Brahman. But is *this* mirroring synchronic or diachronic? The point is that the *ātman's* karmic involvements seem to be the source of the world's diachronicity, and of the self-selfobject "unmatchings" that constitute the suffering of the world. In generating *karma* the *ātman* would seem to be fragmenting Brahman rather than "glorifying" him. We have seen that there is a second phase to the *karmic* process, one of involution and (partial) quiescence of the forward-thrusting karmic pressures at the moment of cosmic dissolution. Involution also seems to occur when the personal self accepts its (*karma*-generated) dharma. It would be at such dharmic moments, when no new *karma* is being generated, that the *ātman* can be said to be actively "glorifying" Brahman.[17]

We have previously used the rubrics *nivṛtti*, "involution" and *pravṛtti*, "evolution" to refer to the two phases of cosmic manifestation; we can equally use them to refer to the stages of the *ātman's* career. Clearly *karma*-generating *pravṛtti* does not "glorify" Brahman, but while the *nivṛtti* phase does do this it would seem to be an odd sort of "glory" that first violates Brahman and then "glorifies" by taking the violation away. Actually we have here another appearance of the "negative selfobject" discussed in the *Sāṅkhyan* context. *Nivṛtti* takes away the bad selfobject, and mirrors the *ātman* and Brahman as free from *karma*. But it is the synchronic aspect of the *ātman*-Brahman relationship that makes *nivṛtti* possible. Without the continuous support of the "existential umbilical cord" the *ātman* would have no way of "remembering" its source in Brahman, or of turning back towards him. This implies that the negative selfobject relationship (saying "no" to *karma*-generating action) rests on a (synchronic) *positive* mirroring

[17] Sanderson describes the attitude of the Vaiṣṇava Kashmiri *Brahmin* in similar terms (1985: 198): "He is enjoined to contemplate the convergence of the parameters of action into an underlying unity in the very process of his Veda-directed activities, cultivating the conviction that it was not he that acted but the self-limiting absolute." Thus agency was ascribed to God, not the human *kartṛ*, whose *karma-s* have no other *raison d'etre* than to glorify God. *Karma* of this sort is not really *karma* ("fruit-generating action") at all.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

relationship between *ātman* and Brahman that persists even during karmic action.[18]

Let us return now to the selfobject perspective on the Brahman-world relationship. It is clear that the "umbilical connection" is easily understood in self psychological terms as implying that Brahman is the self of the world, which is his "body." But is this "body" also his selfobject? That is, does it actively add to, support or detract from his sense of selfhood?[19] We have seen that the specific karmic natures (the *dharma-s*) of the world's entities are the result of the choices of the *ātman-s*. Brahman's creativity merely "ratifies" these choices, and remembers them from age to age following cosmic dissolution (cf Lipner: 71). We have further seen that the *ātman* functions at differing times as a bad and as a negative selfobject to Brahman, but at a synchronic level maintains a positive selfobject tie to him. There is a more direct way in which a Brahman-world selfobject relationship is expressed in Rāmānuja's thought, but one of a quite special sort: we are referring to Brahman's *divya rūpa* or "supernal form" (Lipner: 94) and his cosmic *līlā* ("play").

Brahman's *divya rūpa* is a non-praktic and non-karmic body, in the image of a young man. Rāmānuja identifies it with the "golden *puruṣa*" of the upaniṣads (Lipner: 94), and like the Vedic *puruṣa* (and other Cosmic Men such as Prajāpati, etc.) the *divya rūpa* is capable of "enjoyment" (root *bhuj-*). Brahman's creation of the cosmos is, from this point of view, for the sake of his enjoyment of the spontaneous *līlā* which this involves. The *divya rūpa* seems to image Brahman's synchronic relationship with the world as resting perpetually on the edge of diachronicity. Brahman's creative self is inherently paradoxical: he must somehow have form, since form flows from him,

---

[18] If this analysis is valid we appear to have uncovered another "unconscious" implication of the *Sāṅkhya* doctrine: in order for the *prakṛti* to function as a negative selfobject for *puruṣa* an underlying positive (mirroring) relationship between them seems required, such that *prakṛti* "recalls" an origin in the *puruṣa* (contrary to *Sāṅkhya*). Our analysis of the *Sāṅkhyan* negative selfobject suggested that it is essentially of a synchronic nature, i.e., that *prakṛti* always and only exists to say "I do not exist" to the *puruṣa*. The conclusion would be that *Sāṅkhya's* negative selfobject is at bottom a kind of mirroring selfobject, saying "you" to *puruṣa* through the words "not I."

[19] Kohut often refers to a "body-mind self," thus locating body and mind within the self rather than partly outside, as selfobjects must be; on the other hand, as in the quotation from Kohut and Wolf above, he also considers body and mind to be prototypical of the selfobject.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

but also be formless (since he is not the result of an act of formation, i.e., of *karma*). Rāmānuja's Brahman thus recalls the "large *ātman*" of the Upaniṣads, "a *personified* unmanifest that pervades the universe" (van Buitenen, 1964: 111, emphasis mine). His selfobjects are *in statu nascendi* like the world emerging from Viṣṇu's navel in Purāṇic mythology, and he himself, like the Ṛgvedic (X.90) *puruṣa*, is related to them with only a portion of his being; the other "three quarters" remains "immortal life in heaven" (RV X.90.3).[20] Brahman's relationship to his selfobjects is thus "prior" to the self-selfobject fragmentation or "unmatching" that *karma* entails. Perhaps it is because his selfobject relationships are only potential, or in an initial stage, that Viṣṇu is represented as a *young* man, one thus on the verge of adult life, the time when *karma* is primarily generated.

Part III

The Non-Dual Śaivism of Kashmir

"Kashmiri Śaivism" is currently the subject of intensive research (see, e.g., Sanderson, 1985; Muller-Ortega, 1989; Dyczkowski, 1987; Alper, 1979, Silburn, 1988). Our discussion will be primarily centered on the work of Abhinavagupta, the 10th century Brahman who is generally acknowledged to be the premier thinker of the "school." Even so, no attempt will be made to comprehend his system in detail or to distinguish it from other non-dual Kashmiri Śaiva teachings; instead a few concepts of key importance will be discussed from a self psychological perspective.

Even more than Viṣṇu, Abhinava's Śiva lives on the "edge"[21] of things, his dance marking the origin and dissolution of the manifest world. A cosmic "vibration" (*spanda*) arises when the god enacts the world's birth and death (*pravṛtti* and *nivṛtti*) so rapidly that individual moments of creation and destruction disappear into a single "sound" (*dhvani*), or unique "flavor" (*samarasa, ekarasa*).[22] In this way Śaivism

---

[20] For a discussion of Vedic *sat* (the realm of existent beings) and *asat* (the formless source of the *sat*) as representing two similar aspects of the original being (*tad ekam* or "That One") in Ṛg Veda X.129 see Collins, 1975.

[21] See Muller-Ortega, 1989: 107.

[22] Non-dual Śaivism is replete with sensory imagery, which is not limited to the modalities of sound and taste; visual vibration (from the root *spur-*, etc.) is often spoken of, and touch

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

attempts to go beyond other views in uniting what we have called the "synchronic" and "diachronic" aspects of the relationship between the emanator self (in this case Śiva) and his emanation.[23] By taking a stance from which the process of cosmic *praṛvtti* and *nivṛtti* (or *unmeśa/nimeśa*) is experienced as a single tone or flavor Śaivism in effect merges the diachronic dimension into a (more dynamic) synchronic one[24], and the selfobject into a self which is, as it were, "pregnant" with selfobjects in *statu nascendi*.[25] The effect is similar to that of Viṣṇu's *divya rūpa*, in which the world is not allowed to pass wholly beyond the horizon of Viṣṇu's self, even as the god flirts playfully with this possibility. Compared to Sāṅkhya and Vedānta, non-dual Śaivism focuses much more on the "liminal" area *between* god's atemporal unity and the world of limited entities.

For Abhinava, Śiva the emanator is essentially consciousness. But it is inherent to consciousness to be self-referent, i.e, to possess *vimarśa* ("self awareness"). It is this self-referential process that stands at the base of the cosmic emanation.

> He [Śiva] becomes emitting through his *kaulikī* energy, namely "self-awareness (*vimarśa*)." (Silburn, 1988: 19)

The word *kula* ("family" or other coherent, undivided group) and its derivatives (as *kaulikī*, *kaula*, etc.) is a key term in the non-dual Śaiva literature[26]. The word expresses the unity of an emanated or emitted "entity" as resting on the self which emanated or emitted it, and which continues ("synchronically") to "ensoul" it (to import Lipner's expression). Thus the whole cosmos is Śiva's *kula*, and he is called the *akula* ("non-*kula*") to express the fact that he is not (entirely) included

---

(especially sexual touch) is a central image.

[23] For a clear statement of the unity of these two viewpoints see Singh (1989: 174): "The two dots of *visarga* (:) indicate the truth that though from the point of view of Śakti symbolized by the lower dot, there is an expansion of an outer world, yet from the point of view of Śiva or *Śaktimat* symbolized by the upper dot, the entire universe rests in the I-consciousness of Śiva."

[24] Alpert (1979: 378) claims that "Abhinava postulates ... a theology of constant movement that might be called a Śaiva 'monism' of cosmic process."

[25] The texts are replete with images of swelling, overflowing, unfolding, projection, agitation, surging forth, the "full pot," reservoirs, etc. (cf, e.g., Muller-Ortega, 60, 118, 134, 190; Silburn, 1988: 20, 22, 140).

[26] See Muller-Ortega, 1989: 59-63, 102, 108-110; Silburn, 1988: 19-20).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

in his emission[27]. But Śiva, being consciousness, is self-referent, and to be self-referent is to have the capacity to emit a "family" or "clan" (*kula*). It seems, then, that the *kula* is the means *by which* Śiva refers to himself. In self psychological terms, the kula is Śiva's mirroring selfobject.

The parallel to certain concepts of Indian kinship is evident.[28] The word *kula* in Bengal "refers to a set of one's own people, taking a 'seed male' or 'ancestral male' ... and not 'ego' as its referent." The *kula* "includes all of the male descendants of a common ancestral male, together with their wives and unmarried daughters" (Inden and Nicholas, 1977: 4). While the *kula* is thus larger than the *parivara* family headed by its living *kartṛ* (literally "maker"), the principle is identical: the family unit is defined and given unity by a single male person who thus functions as the family's self, while it is his selfobject. All members of the family must stand "ready to obey his orders and selflessly serve him" (30).

In Śaivism many things are called *kula*, for instance the "group" of disciples surrounding a *guru* (Muller-Ortega, 1989: 61), the personal body (110), and the Śakti or "powers" of Śiva (101). We have seen in the discussion of Rāmānuja that all human faculties, organs and limbs can be understood as selfobjects. Similarly, "the *kula* is the power of Parameśvara [Śiva], his strength, his superiority, his freedom, his potency, his vigor, his mass (*piṇḍa*), his consciousness, his body" (Muller-Ortega's translation, 1989: 100). Just as one's body and mind are "for the sake of" oneself so are the *kartṛ's* family, the *guru's* group of disciples and Śiva's divine powers. It is interesting that the *piṇḍa* is included in Śiva's *kula*; as Muller-Ortega (101) notes, "the term *piṇḍa* ... resonates with the ritual of offering a ball or lump of flour to the departed ancestors. The *kula* seems to function as a sustaining sacrificial offering that is rendered back to Śiva." Through the *kula*, representing the unity of his emanation, the emanator refers back to himself. In the realm of kinship, the offering of *piṇḍas* to the ancestors seems to have the same meaning (cf Knipe, 1977; Inden and Nicholas, 1977: 63).

---

[27] Muller-Ortega, 1989: 59

[28] Kinship imagery in Abhinavagupta is not limited to the *kula*; the fundamental oneness of the "transcendent" (pre-emitting) and vibrational principles — or of Śiva and Śakti — is expressed in the image of "twinship" (*yamala*, Muller-Ortega, 1989: 82).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The *kula* idea or image suggests that Śiva and his consciousness (*vimarśa*), and their relationship to the emitted world, are understood in a "personal" way, i.e., in terms of the relationship of a self and a selfobject such as a family or other "group" which completes a self. Alpert has also interpreted Abhinava's theory as ultimately personal, and states "In Abhinava's synthesis the personal and the impersonal are juxtaposed in such a way that the latter appears as an outgrowth of the former." (1979: 351). He notes that a model underlying much of Abhinava's thought on cosmogony is that of "yogic creation," i.e. the manifestation of entities by a person in yogic trance (362-366). As we saw, a "personal" image of god is also found in Rāmānuja (and his Vaiṣṇava context): Viṣṇu's *divya rūpa*. Like Rāmānuja, Abhinava understands the god's "purpose" in emitting creatures as "play" (*līlā*), by which he seems to mean both that creation is joyful, and that it is not motivated by any lack in the god. As Alper (363) states, Abhinava's ultimate is understood as "self-sufficient."

But as we have noted there is a dark side to self-selfobject unity; this is the possible implication of the divine self (Śiva) in the universal tendency towards particularization, solidification, condensation, contraction or coagulation (*ghanatā*, "the fact of becoming a lump;" cf Muller-Ortega 1989: 102, 260). It is this process that accounts for the existence in the world of apparently separate entities, i.e., things which refer to themselves rather than back to Śiva, the true self. As Muller-Ortega observes (129), non-dualisms such as Abhinava's have difficulty accounting for the "fact" of the actual world of discrete, limited, imperfect entities. In spite of the tendency we noted towards uniting the synchronic and diachronic (or god's eye/ human eye) views, something like this distinction persists in Abhinava. One result is to limit severely the "personal" understanding of Śiva and his nature as consciousness: thus there is no mention of the sorts of "personal" aims which are sometimes associated with *ātman/brahman* in the Upaniṣads, such things as "loneliness" and desire for a wife (*Bṛhadāraṇyaka Upaniṣad* 1.4.3-4).

Let us look again at the *kula* concept. Muller-Ortega (1989: 59, 102) notes that the concept is bivalent, expressing not only Śiva's self-reference through his emissions but also the contraction (*saṃkoca*) or condensation of *entities* out of the manifold self projection of the god. That is, not only is the entire universe (synchronically) god's *kula*, but temporally or physically limited parts or aspects of the world become

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

bound together (diachronically) as *kula-s* for the particular selves (called *aṇu-s* or "atoms") which "inhabit" them. A two-sidedness is at the heart of the *kula* idea: in order for the "family" or "group" to mirror the self it must be a cohesive entity, with the self as its principle of unity. But when the "group" condenses (in a quasi-gravitational way) around the self which is its center it can also be understood as binding or trapping the self within the "lump" (*ghana*) of matter which it has become in the process of "grouping." In this way "the infinite consciousness of Bhairava [Śiva] has been reduced, apparently, to the inertness and unconsciousness of a stone" (Muller-Ortega: 147). With time, and the fiery "digestive"[29] consciousness of Śiva and his devotees, the world's contractions are dissolved again into the god or self.

This difficult idea may shed some light on the very nature of the selfobject and nuclear self. The "buzzing blooming confusion"[30] of unmediated experience coalesces into entities (for example the *tattva-s* of Sāṅkhya, which are taken over by Abhinava[31]), which express and also hide a selfhood. God's self-expressive play is thus also a game of self concealment (Muller-Ortega: 138). In the same way, selfobjects appear to hide the self in the very act of expressing it. All body parts, desires, perceptual faculties, etc., are selfobjects; likewise all features of the "external" world with which these interact. They are selfobjects because they are unified "complexes"[32] which belong to and reveal the self. Thus for example desire to possess a beautiful woman (and the woman herself) are selfobjects. Insofar as these remain integrated in the *kula* of the whole (i.e., in an all-inclusive self) there is only a "temporary" contraction and the process of self-reference (*vimarśa*) proceeds to conclusion. To the extent that the *kula* fragments, and the self becomes fixated on a "sub-*kula*" (e.g., the beautiful woman and one's desire for her) selfhood also fragments. This is contraction in the strong sense.

---

[29] Digestion is yet another bodily metaphor, in this case referring to the active "appropriation" (*svikarya*) of limited beings by the higher self. (Muller-Ortega, 195)

[30] Pierce's "Firstness;" cf Daniel, 1984.

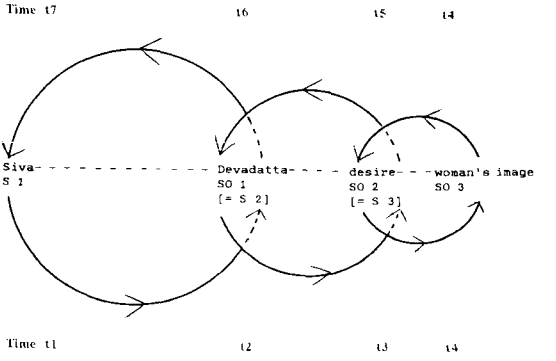
[31] Muller-Ortega, 1989: 129.

[32] The parallel to the Jungian "complex" idea cannot be avoided. It is essential to Jung's idea of the complex (and also archetype) that each of these psychic entities possesses a kind of "I-ness" without which it would not cohere as a specific agency.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Through this process the world becomes filled with "little" (*aṇava*) selves, each at the center of its own *kula*[33]. From the viewpoint of the prior, emanating self these little self-selfobject complexes are constricting, and feel compulsive. In our example of sexual passion for a beautiful woman, the little self would be the passion, and its *kula* the woman; to the larger self caught in such a situation these autonomous desires are like wild horses pulling him where *they* rather than he wants to go. The circle of *vimarśa* is reduced in such a case to the particular desire and its object.

Selfobjects and nuclear selves are clearly "contracted" structures resulting from and bringing about a more or less stagnant condition of the universal vibration. To the extent that the selfobject is a "good" one, i.e. one which fulfills the needs or desires of the self, the contraction is more temporary; to the extent that the selfobject is "bad," and frustrates the self, the contraction is more serious. The nuclear self can of course be more or less inclusive of the person's qualities, desires, etc., but in all cases it excludes much of a person's, and still more of *Śiva's*, actual endowment.



Both nuclear self and selfobject are internally "matched," i.e. homogenous, and "unmatched" from the rest of reality. Enlightenment involves the dissolution of the little selves and limited selfobjects (*kula-s*) into higher selves, and ultimately into Śiva. The process can be visualized as epicyclic: the fundamental "circle of *vimarśa*" gives rise to a smaller circle (for instance that of the personal self) which in turn

[33] Cf Muller-Ortega, 1989: 59).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

produces a still-smaller circle (e.g., of desire for the woman). Enlightenment would occur by first dissolving the woman's image into the desire for her, the desire into the larger self of the person, and then that whole self into the selfhood of the god. This diachronic process can be represented in the diagram on page 190.

Synchronically, the epicycles are merely "harmonics" within the universal vibration of Śiva's *vimarśa*.[34]

The theme of daivic and asuric selfhood, which has been referred to in discussing Rāmānuja, may also help to understand Abhinava's Śaivism. The fact that Śiva is worshipped in his Bhairava form, i.e. as a fierce and "demonic" god, suggests that in Abhinava's philosophical thought also Śiva's activity may be in some sense demonic. Sanderson (1985) suggests that tantric Śaivism understood the daivic attitude of passive attunement to God's will as slavery to an extrinsic power, motivated by a "state of anxious inhibition" (199). In Śaivism, "*karma*-generating" (from a daivic perspective) desires are not to be overcome but rather expressed without inhibition; freely willed, they are realized as identical with the "infinite power of cosmic projection and resorption in the zero-point at its inexpressible end..." (199). The person breaks free from daivic selfhood, seen as confinement, through "the evocation of an omnipotent, all-containing identity immune to this self-imposed tyranny of extrinsicist inhibition" (200). This is asuric selfhood: omnipotent, creative, complete, free from *dharma* and bhaktic submission to God. Unlike its understanding in Rāmānuja, however, asuric selfhood in Abhinavagupta does not lead to constriction and limitation, but rather explodes blockages from within; old, contracted karmic residues are replaced by new, self-expressive *kula-s*.

Conclusions

A comparative study should ideally suggest not only parallels and differences between the "subject" and "object" theories, but also new insights about both. We will now attempt to collect such insights, along with the more narrowly comparative results of our analysis.

---

[34] "The cosmic process consists of a cyclic series of creations and destructions which follow each other like buckets fixed on a water-wheel. Although change is manifest through this process, and change is the basis of time, the pulsation of the absolute is a movement outside the confines of time. iva is eternally engaged in all the phases of the creative act simultaneously and yet performs them one after another." (Dyczkowski, 1978: 81).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Although the three Indian philosophical schools discussed here can all usefully be viewed in terms of the self-selfobject relationship, we have seen that they understand this relationship very differently than Kohut and Winnicott. Some of the major similarities and differences can be summarized as follows.

1. In the Indian theories, contrary to Kohut and Winnicott, there is no ultimate distinction between selfobject and libidinal object. All objects are selfobjects, just as all desires are "for the sake of the self." Only when they become split off from the whole self (i.e., become "asuric" in Rāmānuja's sense) can desires be viewed as primarily libidinal. This view is in fact approached in Kohut's ideas regarding "fragmentation" and "breakdown products:" when the self's cohesiveness fails or is threatened the libidinal drives emerge as more or less autonomous entities; optimally, however, the drives are "woven into" the self, and express its goals.[35] Although Kohut's thought develops in a direction consistent with the Indian perspective, nevertheless – even in the "normal" or ideal human personality – he grants more autonomy to particular human motives and their objects than do our Indian perspectives, which view the self (*puruṣa*, Brahman, Śiva) as the true aim of all partial motives.

2. It is also not easy to find room in the Indian philosophies for Kohut's distinction between "internalized" structures (ambitions and ideals, etc.) and the "external" selfobject realm. From the Indian perspective one can, however, view psychoanalytic "internalization" as a result of the general nature of the self-selfobject relationship, which contains an intrinsic tendency to remerge the selfobject in the self (this is especially clear in the *vimarśa* idea). A selfobject could be said to be "internalized" in an Indian sense whenever it satisfactorily reflects, and so "returns" to the self from which it was felt to emanate; conversely, "externalization" (or "projection" outside) arises when the selfobject refuses to fulfill the needs of the self (this refusal also being an intrinsic

[35] Kohut believes that particular "desires" (libidinal zones, etc.) are on the leading edge of narcissistic development at different ages. But whatever desire "carries" the self's expression at a given stage, it is the fact that the desire is of and for the sake of the self that is essential. This is another indication that for Kohut the libidinal/selfobject distinction was not sharp. Indeed, his theory had developed by the end of his life to the point of at least partially subsuming libidinal desires under the needs of the self, and concluding that object-libidinal conflicts (particularly those of the Oedipus complex) are not independent causes of psychopathology but its result. (Kohut, 1984: 53).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tendency). "Good" selfobjects are internal (daivic) and "bad" ones are external (asuric), by definition. Internalization in this sense occurs in Sāṅkhya when *prakṛti* says "I am not" to *puruṣa*, establishing a negative (but "good") selfobject relationship with him; in Rāmānuja, when body-mind and environment "glorify" the self, and the *jīvātman* as *bhakta* glorifies Brahman; in Abhinavagupta, when "contracted" entities are dissolved in Śiva's *vimarśa*.[36]

Kohut's nuclear self, on this view, contains mostly "good," (interior, mental) selfobjects no different in nature from other "good" (but exterior, physical) selfobjects; however, to the extent that elements of the nuclear self *fail* to enhance the person's self-sense they would tend to be felt as "bad" and external to the self, and would be ejected from the nuclear self. The point of constructing a nuclear self in the first place, we may interpret, must be to protect the self against the ravages of "bad" selfobjects, by assuring the self an (interior) environment that is sufficiently self-enhancing; here Kohut's ideas would coincide with Winnicott's views on the "illusory" realm of the "true self," and its transitional objects and culture (Winnicott, 1971: 116). Both Kohut and Winnicott limit the self's world – as experienced – to a transitional or selfobject realm, beyond which is the cold, "outer space" world of "reality."[37] In normal development, the transitional world expands to include more and more of the "real" world ("internal" as well as "external") as the person becomes capable of relating to the new aspects

---

[36] In Kashmiri thought, unlike Sāṅkhya and Rāmānuja, emphasis is on the moment of creative self-emission; selfobjects are *compelled* to reflect the self which burns through them with the energy of a supernova. We noted above that Śiva's *vimarśa* has an asuric flavor; perhaps it would be better to say that asuric selfhood among selfobjects mimics the selfhood of the Emanator before creation: there is an attempt at creative, autonomous self-expression, and a refusal to be determined by extrinsic forces. The intuition of the Śaiva tantrics might be construed as seeing the explosive self-manifestation of the divine in the karma-generating impulses of humans.

[37] Kohut (1971: 4-5) reports dreams of several patients in which the dreamer imagines himself in a space ship orbiting the earth. Such "self state" dreams can be understood as representing the self's liminal experience of being in danger of losing the selfobject environment (the earth) and being cast into the selfless void. The British psychoanalyst Harry Guntripp has written about feeling "'at home in both the human and universal milieu, experiencing a sense of kinship and belonging. I think it is not a natural or healthy state of mind to experience the universe as merely a stark soulless mechanism which degrades and depersonalizes us to the level of meaningless accidents in an impersonal cosmic process" (1969: 328).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of the world as selfobjects; nevertheless, there always remains an inner area felt to be self-appropriate and an outer area of irrelevant and "bad" objects.

These observations suggest a crucial clarification or modification in Kohut's theory of "transmuting internalization" (the process whereby the nuclear self is formed), which is often felt to be one of his weakest concepts. Kohut emphasizes the *directing* function of the nuclear self, its role of guiding the person towards sources of self enhancement, and of organizing his life around certain aims. It is clear, however, that the nuclear self is also a source of sustaining selfobject experience, of "a core of self-confidence along with nuclear ambitions, values and goals" (Kohut, 1984: 77). Emphasizing the self-enhancing role of the nuclear self, we can see transmuting internalization as the *creation of a self-enhancing environment "inside" the person*. Only one aspect of this is to focus the self on satisfying areas of experience in the "outside" world which resemble the "world" of which the nuclear self consists.

We have discussed elsewhere (Collins, 1991) the parallel role in Indian life of *dharma*, the structuring of the human social environment so as to promote the self-sense of at least some persons. Kohut's "nuclear self," Winnicott's "culture" and Indian "dharmic" society all attempt to place "outside" themselves things which are felt to attack a positive self-sense. In this way – i.e., as tending towards a generally "good" self-sense – the nuclear self corresponds to the Indian type of "internalization," but in the relatively weak form found on the social, dharmic level.

3. Indian mind/body monism implies the substantiality of the mind, and its essential oneness of nature with body and environment. *Buddhi, citta*, etc. are subtle substances, differing only "quantitatively" from grosser substances such as earth and water. Thus concepts such as the "nuclear self," which are essentially "mental," must be modified to fit in the Indian environment. In comparing a person's dharmic nature to the nuclear self we need to recognize that the former involves qualities of the body and of the person's physical and social environment as well as of his "mental" goals, ideals and ambitions.[38]

4. The most significant *similarity* between self psychology and the

[38] In his concept of the "body-mind self" Kohut recognizes that the self has bodily aspects; however it is not clear how the person's environment could be included in the nuclear self.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Indian theories is the essentially two-sided nature of selfhood (and therefore of consciousness, since the Indian philosophies find no difference between the [higher] I and awareness). Just as the self always implies the selfobject, Śiva implies the *kula* and the two together exhibit a twinship, *yamala*; *puruṣa* (again, *contra* conscious Sāṅkhya) implies *prakṛti* who fulfills his "purposes" (*artha*); and Brahman implies the dharmic world which sings his praises. We might express this in the case of consciousness by saying that consciousness is "intentional;" however this intentionality is creative and substantial; it is a matter of a pre-cosmic but substantial Person having the essential character of letting himself flow out of himself so that he can then experience and so reabsorb himself.[39] Awareness is not abstract or immaterial in the Indian perspective.

On the other hand, each of our three philosophical systems (as well as Yoga and Advaita, to which we have alluded) seems to minimize the specifically human or personal needs of its ultimate self or god for the latter's selfobject. Of the three, Abhinavagupta comes closest to acknowledging the "personal" needs of his Emanator for his emissions. As Alper (1979: 351) says, "In Abhinava's synthesis the personal [i.e., Śiva] and the impersonal [i.e. consciousness] are juxtaposed in such a way that the latter appears as an outgrowth of the former." But in discussing the world-emission Abhinava makes it clear that the "cosmogonic drive" (Alper 364) is not motivated by quasi-human desires. There is an outflowing of self, motivated by a self-expressive pressure which is consummated in the return to the source of what is expressed; but we do not find in Abhinava the *Upaniṣadic* metaphors of loneliness, desire for a wife, sons and wealth, or sacrificial fervor (*Bṛhadāraṇyaka Upaniṣad* 1.4.17). The closest thing to a "personal" motive may be Śiva's *camatkāra* (esthetic rapture or amazement) at his own creative energy (Dyczowski, 1987: 93, 199). Śiva, as it were *chooses* to express himself in desires, but although these self-expressions "amaze" him, he is never in their grip; he is not, as the Upaniṣadic self sometimes is, "incomplete" (*akṛtsna*).[40] Without Śiva's esthetic delight in his own playful desires the cosmogonic process would seem rather

[39] Contrast Husserlian intentionality where consciousness lives in a world which it does not emit, although as a *Lebenswelt* it might be argued that the world is to some extent a personal creation.

[40] Cf van Buitenen (1957a): 20.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

colorless.

5. A synchronic-diachronic distinction appears throughout the Indian data: In Sāṅkhya we see it in our reinterpretation of the nature of *kaivalya*; in Rāmānuja in cosmic evolution *vs* the "existential umbilical cord"; in Abhinavagupta in the alternation of coagulation and dissolution *vs* the atemporal, comprehensive *vimarśa*. In Kohut selfhood is primarily diachronic (as one strives to fulfill the "blueprint" of the nuclear self) but also has a synchronic dimension (e.g., in the ideas that the self is innate, and that wisdom is the realization of an ultimate self-cosmos unity). In Kohut, as in India, the synchronic dimension is a "final" aim of temporal life.[41]

In the meanwhile, our philosophies define diachronic way-stations which temporarily hold a quantity of the synchronic ultimate. Reflections of the Indian social *dharma* are found in Abhinava and Rāmānuja. For the latter, it is preeminently the human *jīvātman* who holds the middle ground between Brahman and the brute world of objects, and does this in part by accepting and living his *dharma*. In Abhinava, the middle region (*parāpara śakti*, etc.) is again the most fully "human," as it is at once the realm of increasing "contraction" but also (going "upstream") of progressive resorption in the Origin. For Kohut, a "dharmic" life organized around the nuclear self leads to the "good *karma*" of increasing wisdom, i.e. the realization of the self's oneness with the cosmos ("cosmic narcissism," Kohut, 1968; in Ornstein, 1978: 455). In the same way, Indian "good *karma*" is essentially action within the definition of one's own *dharma* which leads to the realization of a higher selfhood unlimited by one's personal nature. Although present in all our philosophies, this middle dharmic realm is most important for Rāmānuja.

6. The issue of aggression in relation to the experience of "bad" selfobjects is an important one in Kohut, and also in Rāmānuja and Abhinava. Generally the Śaiva approach is more obviously aggressive than the Vaiṣṇava one, and in the image of Śiva's violently destructive *taṇḍava* dance aggression becomes the preeminent means to make "bad" selfobjects "good" again. For Rāmānuja, the aim generally is to allow the body and environment to "pay homage" to the self; this is a

[41] He speaks of wisdom as involving "a shift of the narcissistic cathexes from the [individual] self to a concept of participation in a supraindividual and *timeless* existence..." (Kohut, 1978: 456; my emphasis).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

relatively passive process which might be expressed in the rubric "Relax into your *dharma*." The characteristic images of the gods may also suggest this difference: Viṣṇu sleeps but Śiva dances. Nevertheless, one cannot forget the aggressive *avatara-s* of Viṣṇu, and Vaiṣṇava kings who heroically struggle to reinstate *dharma* on earth; there is a difference in emphasis, but Viṣṇu and his followers can also be aggressive in the service of "good" selfobject behavior.[42]

7. Our earlier discussion of insight can be applied to Rāmānuja and Abhinavagupta as well as Sāṅkhya. All three systems of thought contain practical doctrines of salvation, which can be compared to Kohut's therapeutic concerns. The essence of all of the Indian soteriologies, following our analysis, is the requirement to avoid excessive attachment to objects, because this involves a loss of self. While all three theories describe cosmogony as involving a devolution and increasing fragmentation of the emanator principle, each theory posits a specific kind of cognitive attitude which will prevent or reverse the downhill flow of existence, at least for the person who successfully maintains this attitude. For Sāṅkhya it is a matter of developing and maintaining a sattvic *buddhi* able to say "I am not" to the *puruṣa*; in Rāmānuja the proper attitude is one of acceptance of one's *dharma* and realization that one's nature is consciousness, as is Brahman's; in Abhinavagupta the point is to realize that at the heart of "condensed" experience is the freedom of *vimarśa*.

8. Finally, the issue of "splitting" must be addressed. Our analysis has made it evident that in Kohut and Winnicott, as well as in each of our Indian philosophies, there is a necessary separation between a self experiencing optimal selfobject enhancement (and control of selfobjects as if they were part of his own body or mind), and a self experiencing the suffering of "bad" selfobjects (those which are out of his control, and attack his sense of self-esteem, "self-efficacy,"[43] etc.). While in Kohut only an extreme separation between these self-states is called "splitting," it is clear that a milder form of splitting is essential to the formation and maintenance of the nuclear self; likewise in Winnicott

---

[42] This is of course the context of the *Bhagavad Gītā*, which is the subject of one of Rāmānuja's most important works, and a primary inspiration for his whole system (van Buitenen, 1953: 5).

[43] For the concept of "self-efficacy" see the writings of Albert Bandura, e.g., Bandura, 1977.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the existence of "transitional" phenomena depends on a process of "illusion" which is parallel to splitting. What is specific to each of our philosophies is the kind of split that is posited, and the means of overcoming it.

Kohut's struggle with the relationship between the "whole self," and "partial selves" and their desires (Kohut, 1978: 737-770) to some degree parallels the Indian struggle with the relationship between "absolute" (*ātman*-like) and "relative" (*āhaṁkāra*-like) selves and their "desires" (*bhāva-s*, etc.). The similarity suggests that there is more to the radical Indian "split" of the *ātman/puruṣa* selves from their lower counterparts than an effort to protect a partial self-sense at the expense of abandoning another part of the self to unrelieved suffering. Something like a "whole-self," or better a sense of pure, unqualified "I-ness," seems to be essential to the human being, however "illusory" it may be from an "objective" viewpoint. The glory of Indian thought is its firm hold on this "I-ness" and refusal to make it subservient to the self's empirical needs and desires, which should ideally express the I-ness; India's tragedy is the mirror image "decision" to protect I-ness by denying its need for selfobjects. We hope that this paper has succeeded in bringing to the surface some aspects of the self-selfobject struggle thrashing about beneath the too-still surface waters of India's philosophical self theories.

We also hope to have opened up Kohut's self psychology to fruitful alternative interpretations by viewing it under the Indian perspective of mind-body, inner-outer, and selfobject-libidinal object monism. Actually, the Kohutian (and Western) distinctions between inside and outside, etc. parallel the Indian segregation of an absolute self from a relative one: the point of an internal, mental realm which guides an integrated self towards "good" selfobjects is to maintain the sense of oneself as a whole self. By setting aside libidinal desires as more or less irrelevant to the purposes of the "whole" self, for example, Kohut protects the self from the hurt that unfulfilled desires could do it if they were deeply its "own." Kohut thus splits off much of what India (as we have seen, implicitly or unconsciously) would consider the selfobject sphere (i.e. the whole cosmos, mental and physical), and limits the selfobject realm to things which relate to ideals, ambitions, etc. This has the advantage of bringing about a sustainable level of selfobject support, but at the cost of emphasizing the self's goals and ideals rather than its "I-ness."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Finally, we may suggest that at the root of India's splitting, and Kohut's, is the essentially conflictual or ambivalent nature of the self-selfobject relationship itself. The selfobject "approaches" the self from outside, for the sake of "showing me *I*;" and yet the selfobject equally tends to become "bad" and desert me, reserving the (ahaṁkāric) "I" for itself. The mind and body are also selfobjects, and likewise often prove unfaithful. In order to maintain a center of I-ness, it is unavoidable that the unsatisfied, *saṁsaric* self and the disappointing selfobject must in one way or another be split away from the blissful island of the I and its reflections, or else be robbed in fantasy of their power to threaten it. In the end, however, the reality of I-ness flashes out over the oceanic wastes of the residual world like a lighthouse, and even if the island is a mirage its light alone guides those who wander in the (self-generated) *karma* of a selfless existence; it is *puruṣa* they seek, and "for *puruṣa's* sake" that they seek him.

References

Alper, H.
1979 Śiva and the ubiquity of consciousness: the spaciousness of an artful yogi. *Journal of Indian Philosophy* 1: 345-407.

Babb, L.
1986 *Redemptive Encounters: Three Modern Styles in the Hindu Tradition*. Berkeley and Los Angeles: University of California Press.

Bandura, A.
1977 *Social Learning Theory*. Engelwood Cliffs, N.J.: Prentice-Hall.

Collins, A. and Desai, P.
1986 Selfhood in Context: some Indian Solutions, in M. White and S. Pollack (eds.) *The Cultural Transition*, New York: Routledge and Keegan Paul, 1986.

Collins, A.
1976 *The Origins of the Brahman-King Relationship in Indian Social Thought*. Ph.D. Dissertation, Department of Linguistics, University of Texas at Austin.

Collins, A.
1975 Reflections on RV X.129: Some comments on Walter Maurer's paper. *Journal of Indo-European Studies*.
1990 Dog's tail and the only son. In M. Stein and L. Corbett (eds.) *Psyche's Stories*. Wilmette: Chiron.

Collins, A.
1991 From Brahma to a blade of grass: Indian cosmogony and the self. Journal of Indian Philosophy 19:143-189.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Daniel, E.V.
1984 *Fluid Signs: On Being a Person the Tamil Way*. Berkeley: University of California Press.
Dumont, L.
1970 *Homo Hierarchicus: the Caste System and its Implications*. Chicago: University of Chicago Press.
Dyczkowski, M.S.G.
1987 *The Doctrine of Vibration: An Analysis of the Doctrines and Practices of Kashmir Saivism*. State University of New York Press.
Freud, S.
1914 On Narcissism: an Introduction. *Collected Papers of Sigmund Freud*, Volume 4, 30-59. London: Hogarth Press (1949).
Gonda, J.
1983 Vedic Gods and the Sacrifice. *Numen*, 30: 1-34.
Greenberg, J.R. and Mitchell, S.A.
1983 *Object Relations in Psychoanalytic Theory*. Cambridge: Harvard University Press.
Hartmann, H.
1964 *Essays on Ego Psychology*. New York: International Universities Press.
Hauer, J.W.
1958 *Der Yoga: Ein Indischer Weg zum Selbst*. Stuttgart: Bruno Martin.
Hulin, M.
1978 Sankhya Literature, in J. Gonda ed. *A History of Indian Literature*. Wiesbaden: O. Harrassowitz.
Hulin, M.
1978a *Le Principe de l'Ego dans la Pensée Indienne Classique: La Notion d'Ahamkāva*. Paris: Institute de Civilization Indienne.
Inden, R. and Nicholas, R.
1977 *Kinship in Bengali Culture*. Chicago: University of Chicago Press.
Johnson, E.H.
1937 *Early Sankhya*. London: Royal Asiatic Society.
Jung, C.G.
1960 *The Structure and Dynamics of the Psyche*. (volume 8 in the Collected Works). Princeton University Press.
Kernberg, O.
1975 *Borderline Conditions and Pathological Narcissism*. New York: Jason Aronson.
Kernberg, O.
1976 *Object Relations Theory and Clinical Psychoanalysis*. New York: Jason Aronson.
Kohut, H.
1971 *The Analysis of the Self*. New York: International Universities Press.
Kohut, H.
1977 *The Restoration of the Self*. New York: International Universities Press.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Kohut, H.
1984 *How does Analysis Cure?* Chicago: University of Chicago Press.
Kohut, H. and Wolf, E.
1978 The disorders of the self and their treatment: an outline. *International Journal of Psychoanalysis*, 413-425.
Larson, G.J.
1969 *Classical Sāṅkhya*. Delhi: Motilal Banarsidass.
1980 Karma as a "sociology of knowledge" or "social psychology" of process/praxis, in W.D. O'Flaherty (ed.) *Karma and Rebirth in Classical Indian Traditions*. Berkeley: University of California Press.
1988 *Macrocosm/Microcosm and the Beginning of Indian Philosophy*. Paper delivered at the annual convention of the American Academy of Religion, Chicago.
Larson, G.J. and Bhattacharya, R.S. (eds.)
1987 *Encyclopedia of Indian Philosophies. Sankhya: a Dualist Tradition in Indian Philopsophy*. Princeton University Press.
Lipner, J.
1986 *The Face of Truth. A Study of Meaning and Metaphysics in the Vedantic Theology of Rāmānuja*. Albany: State University of New York Press.
Marriott, McK.
1989 Introduction to an Indian Ethnosociology. In *Contributions to Indian Sociology* (n.s.).
Masson, J.L. and Patwardhan, B.
1985 *Śāntarasa and Abhinavagupta's Theory of Esthetics*. Bhandarkar Oriental Research Institute.
Muller-Ortega, P.E.
1989 *The Triadic Heart of Siva: Kaula Tantricism of Abhinavagupta in the Non-dual Śaivism of Kashmir*. Albany: State University of New York Press.
Mus, P.
1962 Du Nouveau sur RV X.90?. In *Indological Studies in Honor of W. Norman Brown*. American Oriental Society.
Ornstein, P.H.
1978 *The Search for the Self: Selected Writings of Heinz Kohut, 1950-1978*. Ed. by P.H. Ornstein. New York: International Universities Press.
Potter, K.
1963 *Presuppositions of India's Philosophies*. Englewood Cliffs, NJ: Prentice-Hall.
Potter, K. (ed.)
1977 *Encyclopedia of Indian Philosophies, Indian Metaphyysics and Epistemology: the Tradition of Nyāya-Vaiśesika up to Gaṅgeśa*. Princeton University Press.
Potter, K. (ed.)
1981 *Encyclopedia of Indian Philosophies, Advaita Vedanta up to Śankara and His Pupils*. Princeton University Press.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Roland, A.
1988 *In Search of Self in India and Japan: Towards a Cross-Cultural Psychology.* Princeton University Press.
Sanderson, A.
1985 Purity and power among the Brahmans of Kashmir, in M. Carrithers, S. Collins and S. Lukes (eds.) *The Category of the Person.* Cambridge University Press.
Segal, H.
1964 *Introduction to the Work of Melanie Klein.* New York: Basic Books.
Singh, J.
1989 *A Trident of Wisdom* (translation of *Abhinavagupta's Paratrisika* Vivarana). SUNY Press.
Smith, B.K.
1989 *Reflections on Resemblance, Ritual and Religion.* New York: Oxford University Press.
van Buitenen, J.A.B.
1953 *Rāmānuja on the Bhagavad Gītā.* Gravenhage: H. L. Smits.
van Buitenen, J.A.B.
1956a *Rāmānuja's Vedārthasaṁgrāha.* Poona: Deccan College.
1956b Studies in Sāṅkhya I. *Journal of the American Oriental Society,* 76: 153-157.
1957a Studies in Sāṁkhya II. *Journal of the American Oriental Society,* 77, 15-25.
1957b Studies in Sāṅkhya III. *Journal of the American Oriental Society,* 77, 88.
1959 The Indian hero as *vidyadhara,* In M. Singer (ed.) *Traditional India: Structure and Change.* Philadelphia: American Folklore Society.
1979 *Ananda,* or all desires fulfilled. *History of Religions,* 19, 27-36.
Verpoorten, J. M.
1977 Unite et distinction dans les speculations rituelles vediques. *Archiv fur Begriffsgeschichte,*21, 59-85.
Winnicott, D.W.
1971 *Playing and Reality.* New York: Basic Books.
Woods, J.H.
1914 *The Yoga-System of Patanjali.* (Harvard Oriental Series Number 17). Cambridge: Harvard University Press.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Essays on Germanic Religion

EDGAR C. POLOMÉ
University of Texas, Austin

CONTENTS

INTRODUCTION
INDO-EUROPEAN COMPONENT IN GERMANIC RELIGION
SOME COMMENTS ON *Vǫluspá*, STANZAS 17-18
DIVINE NAMES IN INDO-EUROPEAN
GERMANIC RELIGION: AN INTRODUCTION
POSTSCRIPT

Journal of Indo-European Studies
Monograph Number Six
ISBN: 0-941694-34-8
160 Pages, Illustrated
$20.00
MASTERCARD AND VISA ACCEPTED

Institute for the Study of Man
6861 Elm Street, Suite 4H
McLean, Virgina 22101
Telephone: (703) 442-8010
Fax: (703) 847-9524

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Biased Tidings: The Media and the Cyril Burt Controversy

Kevin Lamb
Graduate, National Journalism Center

As recently as June 1992, *Omni* magazine ranked the late British psychologist Sir Cyril Burt as "one of the top ten frauds of all time". Author Linda Marsa's article alleged that:

> Sir Cyril Burt, a pioneering British psychologist, deliberately made up more than three decades of data, from the mid 1940s until 1966, to back up his bogus theory on the relationship between heredity and intelligence. He claimed human intelligence was 75 percent inherited, thereby reinforcing the British class system.

But *was* Burt a fraud? What *Omni* fails to mention is that the most detailed accounts to date find no reliable evidence of fraud and conclude that Burt was *wrongly* accused.

If any lessons emerge from the Burt case it is that social ideology can ruin a scholar's reputation and that the media often distort behavioral science controversies. The media's account of Burt rests on what was assumed to be proven, that Burt invented IQ data and that his alleged fraud is no less a deception than the Piltdown hoax. Burt remains guilty as charged since the media continue to ignore the latest findings. The reporting of Burt's alleged misdeeds, particularly several major distortions and the incomplete nature of the news coverage, illustrate what Aaron Wildavsky refers to as an "egalitarian bias" in the media.

New Findings

In analyzing the evidence against Burt, two British scholars conducted independent investigations by approaching the case from different research interests. Robert Joynson, a retired Professor of Psychology at the University of Nottingham and author of *The Burt*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Affair, began his inquiry by detecting historical flaws in Leslie Hearnshaw's 1979 biography *Cyril Burt, Psychologist*. Joynson expanded his inquiry once he noticed other questionable aspects of the case. His 1989 book, an intricately detailed account, shows why the "evidence" against Burt lacks credibility.

The airing of the 1984 BBC film "*The Intelligence man*" prompted another British social scientist to review the Burt case. Suspicious about the charges of fraud, Ronald Fletcher, Professor Emeritus of Sociology at Reading University (who's now deceased), questioned the accuracy of this dramatization's portrayal of Burt. Fletcher uncovered several weaknesses in the evidence while exploring the political nature of the charges. His 1991 book *Science, Ideology and the Media: The Cyril Burt Scandal* appeared two years after Joynson's account.

Both authors unravel a number of complex issues that were never thoroughly scrutinized. Although Joynson and Fletcher conducted separate inquiries and neither author had a vested interest in Burt's work or the IQ controversy, both dismiss the "evidence" on which the case against Burt rests. Fletcher underscores Joynson's points with supporting evidence, but goes on to question the motives of Burt's detractors. Some scholars are reconsidering their views as a result of this new research.

"The question is entirely reopened," says Thomas J. Bouchard, Jr., Professor of Psychology at the University of Minnesota and a leading researcher on twins.

Comments Richard J. Herrnstein, Edgar Pierce Professor of Psychology at Harvard University;

> The story will be pretty much the reverse of what it seemed to be; not that Burt falsified data in order to promote a political agenda, but that the charges of fraud themselves were motivated politically and that the story was treated the way it was because of political dispositions in the media ...

"Charges of fraud tend to be highly publicized and sometimes the charges are ill-founded. Burt obviously got a raw deal," says Bert F. Green, Jr., Professor of Psychology at Johns Hopkins University.

The Burt controversy has received a great deal of publicity since the mid-1970s when the allegations surfaced. Scores of newspaper and magazine articles have mentioned the case. *The New York Times* covered

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

it in several feature articles from 1976 to 1982. Major news magazines have reported the scandal and "*60 Minutes*" devoted most of a segment to it. Hearnshaw's 1979 biography prompted a number of reviews from the press, including *The Wall Street Journal*, *The New York Times' Book Review* and *The New Republic*. As the *Omni* piece shows, the media continue to repeat the case against Burt. Although reviews of the Joynson and Fletcher books have appeared in academic journals and the British press, no significant U.S. news and opinion publication has reviewed either book. Despite the latest findings, the media version of this story remains unaltered.

Why is there so little ink over these new developments in such a highly publicized case? Why did the media suddenly lose interest in "the most sensational charge of scientific fraud in this century"? Why does the public remain misinformed over all of the details in the Burt case? Before considering why the media have not reported the full story, a review of the controversy follows.

The Allegations

Knighted in 1946 for his achievements in British psychology, Burt established himself as a pioneer in educational and statistical psychology. He worked for the London County Council as Britain's first full-time educational psychologist, was a former president of the British Psychological Society, professor of education at the University of London and chairman of the Psychology Department at University College, London. His lasting achievement, the application of statistical methods in psychometrics, remains far removed from the controversy that tarnished his reputation. During his twenty-one years of retirement, Burt edited the *British Journal of Statistical Psychology*, wrote 200 hundred papers, several books and small tracts, fourteen entries for the sixteenth edition of the *Encyclopedia Britannica* and reviewed over 246 manuscripts for major publishing houses.

From his 1909 paper "Experimental Tests of General Intelligence" to his last book *The Gifted Child*, Burt pursued an ongoing interest in understanding the nature of intelligence. He considered intelligence as an innate general mental ability and thought heredity played a significant role in its development. His views on human intelligence shaped his outlook on education and educational reform. As an advocate of selective rather than comprehensive education, Burt's views influenced Britain's eleven-plus educational system. He pointed

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

which such children could advance together under a separate curriculum that would be tailored to their individual levels of ability. As educational policies became more inclusive and egalitarian, the notion that children should be separated on the basis of ability and mental capacity rather than strictly chronological age was considered elitist.

Likewise, Burt's views on intelligence were dismissed by progressive educational psychologists who, in providing the philosophical underpinnings of comprehensive educational policies, rejected the notion of a measured or objectively defined IQ. In accounting for the persistence of IQ differences, environmentalists excluded the polygenic theory of intelligence. The prevalence of environmental doctrines and an intolerance toward dissenting theories created an unfavorable climate for those who emphasized the role of heredity in intelligence. In the July 1972 *American Psychologist*, fifty eminent scientists signed a resolution entitled "Behavior and Heredity" in an attempt to overcome the hostilities toward behavior genetic research. Shortly thereafter rumors began to spread that Burt's data – findings from research on twins – were fraudulent.

Some irregularities were discovered in Burt's research that provided evidence for the inheritance of intelligence. These irregularities surfaced after Burt's death in 1971 and were the basis for the charges of fraud. The allegations appeared in a 1976 London *Sunday Times'* article by Oliver Gillie, which accused Burt of 'cooking the books' on twin data, writing papers under a pseudonym and rewriting the work of others. Describing this affair as "the most sensational charge of scientific fraud this century", Gillie built his case on the statistical anomalies and uncorroborated circumstantial evidence. The charges were supported mainly by Gillie's claim that two of Burt's research assistants never existed. Since Gillie was unable to locate them, he suspected that they were invented by Burt. The so-called "missing ladies" were considered to be damaging proof that Burt forged his data. This type of "proof" reveals the flimsy nature of the evidence: conjectures based on circumstantial evidence and innuendo.

Burt showed that the IQs of identical twins even when reared in separate and diverse environments were similar. Two professors of psychology with opposing views on the IQ debate and on Burt as well, Leon Kamin of Northeastern University and Arthur Jensen of the University of California, Berkeley, found some statistical irregularities

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

psychology with opposing views on the IQ debate and on Burt as well, Leon Kamin of Northeastern University and Arthur Jensen of the University of California, Berkeley, found some statistical irregularities in Burt's 'kinship' data. Kamin suggests they reveal a deliberate act of fraud and deception. Jensen believes they are "discrepancies and ambiguities".

After accounting for typographical errors and misprints, the basis for assuming that Burt forged his data is the repetition of a few correlations in which the sample size increased but the resulting correlations remain the same. From 1943 to 1966 Burt reported a correlation of .77 and .771 for the IQs of identical (monozygotic) twins reared apart. What Kamin and others point to as evidence of fraud is the fact that this correlation remains constant even though the sample size increased from 15 in 1943 to 53 in 1966. Jensen noted an interesting pattern that emerges when he recently compared Burt's data with the findings from four major twin studies: the Newman, Freeman and Holzinger study of 1937; the 1962 study by Shields; the Bouchard, Lykken, McGue, Segal & Tellegen study of 1990; and a 1992 study by Pedersen, Plomin, Nesselroade and McClearn. Jensen elaborated on the results during an invited address before the American Psychological Association's August 1992 convention:

> I took a weighted mean of the correlations from these four studies that have a total N=130. They're independent studies: two of them were done after Burt's studies were published. The weighted mean of these four studies is .771. Now if Burt faked his data we have to attribute clairvoyance to him or we can simply be more plausible and say it's a coincidence. And if that's a coincidence why can't it be a coincidence [in Burt's case]. Either with or without Burt's figures, the scientific evidence consistently shows a large genetic component in IQ variance. Obviously defending Burt makes no sense if one's aim is only to defend the basis of his conclusions about the heritability of intelligence, since it has been consistently substantiated by other studies.

The gravamen of this case centers on how these invariant correlations are interpreted. Most of the negative publicity stems from the circumstantial evidence that presumably implicated Burt and has very little to do with Burt's data. The few actual critiques of Burt's data

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

have been explained or discounted upon further review.

Hearnshaw's biography secured Burt's place in the annals of scientific frauds. Confronted with the allegations while working on the biography, Hearnshaw became convinced that Burt falsified some data even though he considered most of Burt's work to be authentic. His exclusive access to Burt's diaries persuaded him of Burt's misconduct. In assuming the validity of Hearnshaw's judgment, the British Psychological Society officially accepted his findings in 1980. Thus Hearnshaw's work seemed to close once and for all the controversy that engulfed Burt's reputation. However Hearnshaw's assessment of what he considered damaging "evidence" subsequently led others to question his findings.

Hearnshaw established his case on a dubious claim, namely, that Burt's diaries reveal a great deal about his life. Although he claims the entries are very detailed and thorough, Fletcher describes such "detailed" entries as nothing more than date books of trivia. The diaries cover the years of 1953-1960 and include about half the number of total possible dates. Weeks pass between some entries while other known events in Burt's life are omitted, for instance, the death of his secretary. No entries appear for 317 days in 1953 and 284 days in 1954.

Herrnstein recalls Hearnshaw's impression of Burt's diaries. "After I read Hearnshaw's book, particularly because of the way he characterized Burt's diaries, I had decided at that point that in his later life Burt really went off the rails. It seemed reading Hearnshaw's book that Burt couldn't have done those studies at that time and fail to mention it in a detailed diary. Here was a guy, according to Hearnshaw, who was noting in his diary almost everything he did and yet he failed to mention the fact that he gathered data for these original papers:

> What we learned in both Joynson and Fletcher is that that diary was not a detailed diary, it was more like an appointment book. There were any number of things, important things, that he didn't mention in that so called diary, but he did mention things like that he had a dental appointment at 2:30 on such and such day. Well I asked myself at this point if someone saw my appointment book and tried to infer from it what was going on in my life intellectually then by that standard they'd certainly assume that everything I've ever published has been fraudulent since I never put in my

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

appointment book things that are going on in my life intellectually.

Most of Burt's defenders accepted Hearnshaw's judgment when he concluded that Burt fabricated some data. Two scholars who rejected the charges initially but thought Hearnshaw had put the issue of Burt's guilt to rest, Hans Eysenck, Professor Emeritus of Psychology at the Institute of Psychiatry in London and Professor Jensen, now have second thoughts.

Eysenck, a former student of Burt's and now Senior Co-Editor of the journal *Personality and Individual Differences*, who earlier committed himself to the attack on Burt, modifies his views in a brief reference to Joynson's work in his autobiography *Rebel With A Cause*:

> Quite recently R. B. Joynson has published his book, *The Burt Affair*, which meticulously goes over the evidence, coming to the conclusion that Burt was innocent of the crimes he was accused of. He makes a strong case, but of course where the evidence is inevitably circumstantial, certainty can never be achieved one way or the other.

Eysenck considers Fletcher's work to be equally impressive. "I have no doubt that the book produces new evidence and arguments which must be considered in coming to any form of conclusion – or even in deciding to come to no conclusion, and prefer the Scottish verdict of "not proven", which may be the most apposite."

Jensen claims that the latest findings "would cause an impartial jury to rule out the verdict of 'fraud', not just as being 'not proven' but even as being implausible." Jensen, the author of "Scientific Fraud or False Accusations? The Case of Cyril Burt" in *Research Fraud in the Behavioral and Biomedical Sciences* by David J. Miller and Michel Hersen, believes Burt was prematurely and falsely accused. *The New England Journal of Medicine* praised this edited volume as a "rewarding" book and noted that, "Three of the most fascinating chapters discuss the case histories of three persons whose alleged misconduct has received abundant attention from the media – John Darsee at Harvard, an Iraqi con named Elias Alsabti, and the famous British psychologist Sir Cyril Burt".

The strangest incident in this entire case occurred right after Burt's death. Liam Hudson, Professor of Educational Psychology at Edin-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

burgh University and an adversary of Burt's, visited Burt's secretary Gretl Archer immediately after his death in 1971. Archer was unsure about what to do with some data that Burt kept in a few old tea crates. Hudson, after sifting through the material, advised her to destroy the data since in would be of no value to anyone. Unaware of Hudson's former standing with Burt, Archer carried out his suggestion and burned the rest of the data. Since most of Burt's private and published work were handed over to university archives, some consider Hudson's advice to destroy rather than preserve this material quite bizarre.

After reviewing the entire case, Fletcher and Joynson find other explanations answer more plausibly the ambiguous questions that remain over Burt's research. The interpretation of fraud is unwarranted due to far more tenable practical matters. Those who promoted Burt's guilt dismissed all too eagerly the likelihood of other feasible explanations. For instance: some data were lost and eventually recovered after the war years, some data were intentionally destroyed after Burt's death, simple editing and typographical errors were found in the research papers in question, some statistical irregularities pertain to both the physical and mental measurements which suggests carelessness rather than sheer deception, Burt admitted to his sister Marion Burt that with age he had to check his research again and again for "childish mistakes", and so on.

As to the charge that articles were written by Burt and attributed to others, which involved two British Psychologists Alan and Ann Clarke, Fletcher devotes an entire chapter in laying out the details of this particular accusation. What Burt was guilty of rewriting were summaries of their Ph.D. theses as abstracts that appeared in the *British Journal of Educational Psychology*. The practice of abstracting such work in this fashion is neither unusual nor unethical. However, Burt was known to have written articles and book reviews under pseudonyms. Although this is considered unethical by today's standards, the practice was not uncommon during Burt's day.

Since the release of both the Joynson and Fletcher books, a number of British social scientists are attempting to clear Burt's name. As a result, the Council of the British Psychological Society in February 1992 amended their 1980 position and decided that "twelve years ago the society assumed that Burt was guilty of fraud. We no longer hold that view. It is not that we have looked at the evidence and come to a

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

different conclusion. We have decided that we ought not to be taking a corporate position at all."

The true test of the Joynson and Fletcher studies will rest on how well they hold up over time. A forthcoming edition of the *Encyclopedia of Psychology* by Raymond J. Corsini incorporates the Joynson and Fletcher findings in a revised biographical entry on Burt. The amended entry notes that, "The evidence in these two books cannot be ignored in making an assessment of Burt's contributions and his reputation." The question now is whether or not this research is being ignored.

The Media and Egalitarian Bias

Did the media present an impartial and objective portrayal of Burt in reporting the controversy?

A crucial factor in Burt's downfall relates to how the media reported the allegations. When Burt died, he left a distinguished reputation intact. Once the allegations surfaced, it wasn't long before Burt's image became cold and sinister. His legacy became more villainous as the news accounts intensified. The result of this sensational publicity tarnished Burt's reputation. Consider Burt's image as conveyed in *The New York Times*' obituary from October 1971:

> Originally a classics scholar, Sir Cyril became interested in psychology while attending Oxford, where in the early 1900's he helped set up the first child guidance clinic in England. In 1913, he was engaged by the London Country [sic] Council the first psychologist appointed to an education authority anywhere in the world.
>
> He held this post for seven years, drawing on his studies of mentally defective and gifted children to disprove *many over-simplified and biased explanations* about causes for maladjustment, backwardness and delinquency in the school population.
>
> *Sir Cyril was one of the first educational psychologists to stress the great importance of understanding the social backgrounds of children investigated.* [Author's emphasis].

Since the scandal broke in 1976, *The New York Times* carried several articles on Burt's alleged fakery. As the *Times* periodically updated the Burt case for their readers, the *Times* selectively reported whatever the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

paper wanted to emphasize. In the process, the *Times* distorted views that were attributed to Burt and failed to critically assess the evidence by any objective standard. Some articles unreasonably go out of the way to maximize as much of a negative impact as possible. A different picture of Burt emerges as a result, not one who simply fudged a few numbers, but one who is a ruthless reactionary.

In a 1976 *Times'* piece by Boyce Rensberger, Burt is no longer one who "helped establish a child guidance clinic" or who stressed "the great importance of understanding the social backgrounds of children", but one who believed "that intelligence was predetermined at birth and largely unchangeable". Burt, we now learn, had a "prejudice against all classes but his own".

Early in November 1978, *The New York Times'* launched its sharpest attack, again by Rensberger. "Data On Race Role In I.Q. Called False" summarized a report from *Science* by D.D. Dorfman, Professor of Psychology at the University of Iowa, in which he claimed to have "new findings" that showed how Burt fabricated data which "he presented as having been scientifically derived". Two points are worth considering here.

First, Dorfman's research was thoroughly rebuffed by two statisticians whose letters appeared in subsequent issues of *Science*. Stephen M. Stigler, Professor of Statistics at the University of Chicago and Donald B. Rubin of the Educational Testing Service, pointed to major errors, formula mistakes and flawed logic in Dorfman's paper. In a letter to *Science*, Stigler and Rubin note that "using Dorfman's inappropriate statistical techniques to detect fraudulent data would be to condemn a major portion, if not all, of empirical science as fraud." Furthermore, two other individuals, Charlotte Banks, Lecturer in Psychology at University College, London, and Arthur Cohen of New York made similar arguments independent of one another. Even though this criticism of Dorfman's research emerged after the *Times'* piece, it is never followed-up by the *Times* or any other news organization. Such a devastating critique should have prompted a second piece that examined this dispute more closely.

Second, the article intentionally casts Burt in the worst possible light by attaching the added baggage of racial differences in IQ scores. Although the subtitle reads, "Iowa Professor Rules Out Findings on the Idea That Heredity Makes Whites Superior", Dorfman assesses Burt's research as it applies to social classes, race doesn't even enter into

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Dorfman's study and has virtually nothing to do with Burt's research. Here are the first two paragraphs of the *Times*' article:

> Proponents of the idea that hereditary differences make whites intellectually superior to blacks have lost one of their major bodies of evidence.
>
> The purportedly scientific reports of Cyril Burt, the British founder of educational psychology and long time advocate of the genetic basis of racial differences in intelligence, have been virtually proved to have been based on fabricated data.

It ends by claiming that Burt, "Also contended, on the basis of his alleged tests, that Jews and the Irish were less intelligent than the English and that men were smarter than women".

Even though other researchers, such as Eysenck and Jensen, have explored the issue of racial differences, Burt had very little if anything to say on this topic for the simple reason that he never fully addressed the issue in his research. Burt's work showed some correlation among social class differences and variation in IQ, but Burt said very little about race. What little he does say, according to Hearnshaw, directly contradicts what the *Times*' article reports.

> Burt was not a 'racist', and never at any time expressed 'racist' opinions, except to suggest on the basis of test results that there might perhaps be a certain intellectual superiority among Jews...However, his final conclusion was, 'In the case of the individual we found the influence of heredity large and indisputable; in the case of race, small and controversial.'

In another passage, Hearnshaw makes the following point about Burt's social and political views:

Burt was equally detached from stereotyped political attitudes. The critics, who towards the end of his life regarded him on the basis of his *Black Paper* contributions as a right-wing reactionary, totally misjudged him. Burt was remarkably free from political social prejudices.

Again, Burt briefly touches upon race in a critique of Jensen's 1969 *Harvard Educational Review* article that appeared in the May 1, 1969 issue of the *New Scientist*:

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

> I believe, therefore, that, although there are minor differences in the innate abilities of different races, they are, with a few rare exceptions, comparatively slight, except where selective immigration has affected the composition of the groups actually tested. On the other hand, the individual differences *within* each race (which are far less likely to be influenced by cultural differences) are so wide as almost to swamp the small differences between the averages for truly representative samples.

In another *New York Times*' piece of January 1979, "Further Proof That I.Q. Data Were Fraudulent"by Fred M. Hechinger, their readers discover that Burt's theory on the inheritance of IQ "found its most murderous expression in Hitler's extermination policy..." One wonders if this is really an attempt to uncover the truth as to whether or not Burt committed fraud or if there is another reason for making such an inappropriate and outrageous comparison.

Nicholas Wade responds to Richard Herrnstein's criticism of how the press cover IQ related issues in a 1982 *Times*' article, "The Shadow Over Race and I.Q.". One of Wade's points is simply that "reporters show better scientific judgment than [Herrnstein] gives them credit for. Science is supposed to be a community of scholars who constantly check each other's work." This is exactly what has happened in the Burt case yet it continues to go unreported. The scholarly process of reviewing and checking the research of others actually worked. What appeared to be a sound assessment of Burt (Hearnshaw's biography) proved to be short of the mark and other social scientists corrected the record. Quite the contrary to Wade's point, journalists were incapable of objectively rendering a careful review of the published accounts. Ironically, the one reviewer who detected some of the questionable claims in Hearnshaw's book was Lee J. Cronbach, professor emeritus of psychology at Stanford University.

Wade's point should also apply even handedly to journalists and academics alike when evaluating the published claims on Burt. Although Wade notes that the academic community accepted Burt's research at face value for years, which in turn shows how scholars inadequately handle cases of research fraud, his point is equally valid in another way. One can easily provide examples of scholars who carelessly have repeated erroneous or exaggerated accounts of Burt's alleged misdeeds by simply accepting at face value what someone else

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

has written.

For instance, a new study titled *Stealing into Print: Fraud, Plagiarism, and Misconduct in Scientific Publishing* by Marcel C. LaFollette, Associate Research Professor of Science and Technology at George Washington University, is a good example of how a full-scale study on the issue of fraud is tarnished as a result of the author's limited knowledge of essential details in the Burt case and negligent use of questionable and outdated material. In reviewing *Stealing into Print* for the *New Scientist*, freelance writer Wendy Grossman briefly points this out. "LaFollette parades before us – but never quite tells us the whole stories – the cases of Cyril Burt, cold fusion claimants Martin Fleischmann and Stanley Pons, and Stephen J. Breuning."

LaFollette uses particular aspects of the Burt case in order to emphasize various points in her book. She writes the following on page 169;

> Inconsistencies in internal evidence stimulated the initial questioning of the work of Cyril Burt; but here, too, Burt's contributions to science had shielded him from criticism and made deception seem improbable. Eventually, some skeptics questioned why the statistical correlations used to support conclusions in papers he published from 1913 to 1966 remained not just consistent but identical, even though his project supposedly included an increasing number of experimental subjects.

What LaFollette seems to be referring to in this passage is Burt's 'kinship studies', and more specifically Burt's research on twins. Although her summary is vague to the point of being confusing, given how the rest of the paragraph reads, she evidently has in mind the 'invariant correlations' in Burt's twin data that had remained "identical" despite the increases in sample size. The rest of the paragraph notes:

> This fact, as journalist Nigel Hawkes observes, was "a mathematical impossibility which seems to have gone unnoticed at the time [of initial publication]" but was noticeable when scientists examined the work as a whole. After analyzing Burt's personal diaries, one of his biographers concludes that, because the diaries were exceptionally detailed but omitted discussion of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

certain key research projects, Burt may not have conducted those projects at all.

First, the actual dates of the papers she makes reference to are from 1943 to 1966 and not as early as 1913 as she contends. Joynson covers this particular charge in great detail in chapter six of *The Burt Affair*. Second, Hawkes' claim that the repetition of these statistical correlations is "a mathematical impossibility" is incorrect. As Jensen and others have pointed out, the chances of this happening may be remote but are not impossible. Third, LaFollette is apparently unaware of the questions that surround Hearnshaw's assessment of Burt's diaries as being "detailed". As was noted earlier, Hearnshaw's interpretation of the diaries has been challenged by Fletcher and others.

From the so-called "missing assistants" to questions surrounding Burt's data, LaFollette refers to what one can only describe as questionable and unreliable information. The Joynson and Fletcher books alone, totaling some 766 pages, strip away much of what has been presented as fact, hence damaging the credibility of the allegations LaFollette presents again as fact. What remains puzzling about all this is a footnote on page 43 of LaFollette's text that draws attention to the Joynson and Fletcher books. When asked if she had read either book, LaFollette admitted that she had not and knew very little about them. Perhaps this is what Wade had in mind.

In evaluating the literature on Burt, from news accounts to textbook entries, one notices just how glib these second-and-third-hand accounts are. Some brief summaries clearly exaggerate the scope of the initial charges by using sweeping assertions. Typically, the exaggerated claim reads that 'now he stands accused of having faked much if not all of his research.' For instance, the 1988 fourth edition of *Psychology* by Darley, Glucksberg and Kinchla makes the same assertion:

> Taken at face value, Burt's [twin] study appeared to provide very strong evidence for an overwhelming genetic effect on IQ. However, it has now become clear that Burt's study can not be taken at face value. *There is clear evidence that much of his public work was fraudulent, and much of his data invented.* [Emphasis mine]

The 1991 edition of *Social Psychology* by Reuben M. Baron and

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

William G. Graziano glosses over the same story:

> Shortly after Burt's death in 1971, however, it was discovered that *Burt fabricated many of his data* so that they would support the heredity position. [Emphasis mine]

Considering that the charges apply only to a limited amount of Burt's research, the allegations took on a life of their own by engulfing "much" or "most" of his work. The tendency among writers has been to inflate Burt's misdeeds beyond the reasonable bounds of accuracy. These simplifications are either inaccurate (in some cases) or grossly distorted (in others). Kamin was the only expert who suggested that Burt was a career fraud, which Hearnshaw and others have dismissed as a baseless charge.

The *Time* article, "A Taint of Scholarly Fraud", of December 6, 1976, reports that "It thus seems increasingly possible that the women [Burt's assistants] never existed, that their investigations were never carried out and that Burt invented them and their reports". This is a good example of re-packaged "news"; reporting previously published claims with little or no change. A number of news accounts recycle various claims from earlier reports without independently verifying such claims or analyzing questionable events. For example, a few published accounts and the "*60 Minutes*" segment – "The IQ Myth" – reveal the destruction of Burt's data, but fail to question Hudson's actions in this regard. The *Time* piece above repeats one of Gillie's claims. The fact that Gillie failed to locate the "missing assistants" tells us more about his investigative efforts than of Burt's devious nature.

This particular aspect of the scandal is important because it's often repeated and it's also the weakest part of the "evidence" against Burt. These so-called "invented" assistants were neither "invented" nor "missing". Fletcher shows that there is ample proof of their existence. One of the assistants, Miss J. Conway, "was officially employed by the LCC [London County Council] in the field of child care". Fletcher confirmed her employment with LCC officials and then located Conway's birth certificate. Shortly after his book was published, Conway's children got in touch with Fletcher. In addition, some individuals stepped forward and said they remembered Burt's assistants. The other "invented" helper, Miss M. A. Howard, is listed as a member of the British Psychological Society in 1924.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Burt's eminent reputation eventually faded to that of a "cheat", "liar", "con man", "confidence trickster", "old Rogue" and "psychopath". News accounts described him as an insensitive wretch that was temperamentally unbalanced. As Professor Green points out in the November *Psychological Science*, contrary to this corrupt picture:

None of the authors of the books listed [Hearnshaw, Joynson and Fletcher] depicts Burt as a scoundrel.

> All find some reason to question the behavior of his detractors. All find the newspaper charges of fraud excessive, and the television docudrama deplorable. Burt may have been overly sure of himself, and to many he seemed arrogant and high-handed. Burt may have remained too long as editor of "his" journal. None of this is commendable, but neither could it be called unethical.

The defining aspect of Burt's guilt, setting it apart from other cases of research fraud, was shaped by the nature of the news coverage. As long as the "evidence" sensationally undermined Burt's reputation (one who had it coming) then it constituted news, but when such "evidence" is refuted then it's no longer worth reporting. In this case, the accusations of impropriety and the actual deed itself were presented as being one and the same. Proven or not, Burt's misdeeds achieved notoriety among the folklore of frauds. Veteran journalist Richard Clurman elaborates on the consequences of being falsely accused in his 1988 book *Beyond Malice*:

> When the press accuses, the accusation is bigger news than the reply. Charges, indictments and convictions are given more space and bigger type than acquittals, vindications or retractions. People who turn up in the press in a bad light often fade away in dim light if they turn out to be innocent rather than guilty of the accusations originally made against them.

One could make a similar point by arguing that debunking someone's work draws more publicity than restoring a maligned reputation. This explanation of why the media have ignored these new findings is a valid point, but one that fails to fully explain why the case is no longer worth updating. Could the fact that not only one but

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

two independent inquiries, which have essentially reopened the case, be any thing other than "news"? *Fortune* columnist Daniel Seligman highlights these inconsistencies in his recent book *A Question of Intelligence*.

> It is true, of course, that many books go unreviewed, including some that seem quite meritorious. But it does appear odd that the media, which had repeatedly run news stories and articles about the significance of Burt's fraud, never got around to mentioning the substantial new evidence suggesting that there had never been one.

Another explanation for the lopsided coverage on Burt is Aaron Wildavsky's theory of an "egalitarian bias" in the media. Wildavsky's claim is rooted in his cultural theory of American society. He splits American society into four sub-cultural elites: the individualistic, hierarchy, fatalistic and egalitarian. What distinguishes egalitarians from the rest is their rejection of authority and their preference for equality of results over equality of opportunity. "Thus egalitarians may be expected to prefer reduction of differences – between races, or income levels, or sexes, or parents and children, teachers and students, authorities and citizens," Wildavsky notes. *Webster's Third International* sums up egalitarianism as "the suppression of all distinctions between individuals and groups as inherently unjust: an extreme social and political levelling".

A leading political scientist and author, Wildavsky believes that the "media elite" are essentially an "egalitarian elite". He acknowledges that a high percentage of liberals occupy "elite" media positions, but argues that what is often perceived to be a "liberal bias" may in fact be an "egalitarian bias". Even though the mass media adopt an adversarial role that is considered to be a political, when reporting controversial issues that impact on society, this adversarial role often takes an egalitarian form. In covering any given social issue that contains an egalitarian aspect, the media elite are generally less inclined to criticize the egalitarian side of an issue. He dismisses the notion that reporters can *always* report the "news" objectively and leave aside their own preconceived views. Wildavsky is on firm ground simply because reporting the "news" is a subjective enterprise.

Journalists frequently hone their craft by choosing an "angle" and

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tailoring the "news" to fit a given perspective. Whether selecting choice material in order to put a certain spin on a story or narrowing one's approach by eliminating facts and views that a given reporter dislikes, such conscious decisions invite some margin of "bias" in reporting the news. The persistence of egalitarian views among the media elite would account for the type of bias that is apparent in controversies like the Burt case. The topic of bias in journalistic circles touches a raw nerve and quite often it's overused. Even so journalists inappropriately dismiss the issue of bias when it is directed at themselves, yet are quick to condemn behavioral scientists for failing to detect it in their work.

One way of assessing the accuracy and objectivity of the media coverage on Burt, which would also test Wildavsky's theory, is to consider the track record of the media in reporting the IQ controversy. Since the Burt case represents a segment of IQ related stories, it's conceivable that if the media have established a pattern of misrepresenting the scientific findings on IQ issues, then this may explain why the coverage on Burt was so distorted. What is the record of the media in reporting the various issues that surround IQ testing?

The most comprehensive survey on this very question, *The IQ Controversy* by Mark Snyderman and Stanley Rothman, give the media poor marks in covering the issue accurately and objectively. The 1988 study compared the views of 661 experts in the testing field with the news coverage on a range of testing issues and found that the news reports do not reflect the views of those polled in the expert community.

> Our work demonstrates that, by any reasonable standard, media coverage of the IQ controversy has been quite inaccurate. Journalists have emphasized controversy; they have reported scientific discussions of technical issues erroneously and they have clearly misreported the views of the relevant scientific community as to the interaction between genetic and environmental factors in explaining differences in IQ among individuals and between groups.

If the media have the responsibility of providing the public with an accurate account of news events, they also have the responsibility of keeping the public accurately informed whenever new developments

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

occur. Dan Rather once noted that the task of reporters is in "being honest brokers of information". This adds to what William L. Winter of the National Press Institute said when he noted that journalists should be "doing a much better job of telling the whole story."

Selectively reporting the "news" by distorting or filtering out unpopular empirical research violates the public's trust. Inferences will always play a significant role in deciphering the "truth" where the full story is incomplete, but in so doing it needs to be based on accurate assessments of the facts, not hearsay or general assumptions or preconceived ideological convictions.

The portrayal of Burt as a cold and ruthless crank reflects sensational trends of contemporary journalism. The high price of getting more news "analysis" and less "news" is contending with the analyst's skewed perception of reality. In dealing with controversial topics what is often considered "news" is usually a thematic composite of partial truths, conjectures, ideological sentiments and opinion. A closer look at the coverage of IQ stories in general and the Burt controversy in particular shows this to be the case. Neither the allegations nor the evidence in the Burt affair were ever thoroughly scrutinized by the media. As Wildavsky points out, "the criterion of truth has become undervalued".

The essence of Burt's vice was his denial of universal equality, for which the politically correct exploited. As Professor Raymond B. Cattell has said, "The mass media conveyed to a large public that any inheritance of intelligence was a myth, and Burt became the effigy of behavior genetics, in whose burning all claims for genetic inequalities and differences hopefully went up in smoke." Burt was in no uncertain terms a controversial figure. He was candid, and by today's standards, crude in some of his descriptions. For all of Burt's personal faults and professional shortcomings, being a fraud isn't likely to be one of them.

References

Aldhous, Peter
1992 Psychologists rethink Burt. *Nature*. 356.

Banks, Charlotte
1983 Professor Sir Cyril Burt: Selected Reminiscences. *AEP Jour*. 6; 21-42.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Baron, Reuben M. and William G. Graziano
1991 Social Psychology. New York: Holt, Rinehart & Winston.

Bates, Stephen
1992 Psychologists press for inquiry into Burt's 'faked' child IQ work. *London Guardian/Observer*. May 23, 1992.

Bouchard, Thomas J. et. al.
1990 Sources of Human Psychological Differences: The Minnesota Study of Twins Reared Apart. *Science*. 250; 223-250.

Brotman, Andrew W.
1991 *New England Journal of Medicine* 323; 841.

Burt, Cyril
1969 Intelligence and Heredity *New Scientist* May 1; 226-229.

Cattell, Raymond B.
1980 *Behavior Genetics*. 10; 317-325.

Clurman, Richard M.
1988 *Beyond Malice: The Media's Years of Reckoning*. New Jersey: Transaction Publishers.

Corsini, Raymond J.
1992 Encyclopedia of Psychology.

Cronbach, Lee J.
1979 *Science* 206; 1392-1394.

Darley, Glucksberg and Kinchla
1988 Psychology. Fourth Edition.

Dorfman, D.D.
1978 The Cyril Burt Question: New Findings. *Science*, 201; 1177-1186.

Eysenck, Hans
1990 Rebel With A Cause. London: W H Allen.
1992 *Personality and Individual Differences* 753-754.

Fletcher, Ronald
1991 Science, Ideology and the Media: The Cyril Burt Scandal. New Jersey: Transaction Publishers.
1991 Intelligence, Equality, Character, and Education. *Intelligence*. 15; 139-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

149.

Gillie, Oliver
1976 Crucial data was faked by eminent psychologist. *Sunday Times*. London: October 24.
1978 Sir Cyril Burt and the great IQ fraud. *New Statesman*. November 24; 688-693.

Green, Bert F.
1992 *Psychological Science*. 3; 328-331.

Gruber, Howard E.
1979 A Dr. Strangelove of the Mind. *The New York Times Book Review*. December 16; 3.

Hearnshaw, Leslie
1979 Cyril Burt, Psychologist. New York: Cornell University Press.

Hechinger, Fred M.
1979 Further Proof That I.Q. Data Were Fraudulent. *New York Times*. January 30.

Herrnstein, R. J.
1982 IQ Testing and the Media. *Atlantic* August; 68-74.
1992 Interview with author, August 5, 1992.

Jensen, Arthur R.
1974 Kinship Correlations Reported by Sir Cyril Burt. *Behavior Genetics*. 4; 1-28.
1978 Sir Cyril Burt in Perspective *American Psychologist* May; 499-503.
1991 IQ and science: the mysterious Burt affair. *The Public Interest*. 105; 93-106.
1992 Scientific Fraud or False Accusations? The Case of Cyril Burt. In, Research Fraud in the Behavioral and Biomedical Sciences. Ed. David J. Miller and Michel Hersen. New York: Wiley.
1992 The Cyril Burt Scandal, Research Taboos, and the Media. *APA address*; August 15, 1992; Washington, D.C.

Joynson, R. B.
1989 The Burt Affair New York: Routledge.

LaFollette, Marcel C.
1992 Stealing into Print: Fraud, Plagiarism and Misconduct. In, Scientific Publishing. Berkeley: University of California Press.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Lasagna, Louis
1992 *New England Journal of Medicine* 327; 1821.

Loevinger, Lee
1991 Raking Over the Coals. *Nature* 352; 120.

Marsa, Linda
1992 Scientific Fraud. *Omni.* June 1992. 14; 40.

Panatty, Charles and Malcolm MacPherson
1976 An epitaph for Sir Cyril? *Newsweek* December 20;76.

Pederson, N.L., R. Plomin, J. R. Nesselroade, G. E. McClearn
1992 A Quantitative Genetic Analysis of Cognitive Abilities During the Second Half of the Life Span. Psychological Science 3; 346-353.

Rensberger, Boyce
1976 Briton's Classic I.Q. Data Now Viewed as Fraudulent. *The New York Times*. November 28; 26.
1978 Data On Race Role In IQ Called False: Iowa Professor Rules Out Findings on the Idea That Heredity Makes Whites Superior. *The New York Times*. November 8; 9.

Rowe, David and Robert Plomin
1978 The Burt Controversy: A Comparison of Burt's Data on IQ with Data from Other Studies. *Behavior Genetics*. 8; 81-83.

Scarr, Sandra
1991 Sir Cyril Burt Reconsidered: The Science and Politics of British Psychology. *Contemporary Psychology*. 36; 200-201.

Seligman, Daniel
1992 *A Question of Intelligence: The IQ Debate in America*. New York: Birch Lane Press.

Snyderman, Mark and Stanley Rothman
1988 *The IQ Controversy, the Media and Public Policy*. New Jersey: Transaction Publishers.

Stigler, Stephen M. and Ronald Rubin
1979 Burt's Tables. *Science* 204; 242-246.
1979 Dorfman's Data Analysis. *Science* 205.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Wade, Nicholas
1982 The Shadow Over Race and I.Q. *The New York Times*. September 10; 22.

Wildavsky, Aaron
1991 The Rise of Radical Egalitarianism. Washington, DC: The American University Press.

Winter, William L.
1990 Putting the World in Perspective: The Economic and Competitive Environment of the News Media. Address before National Association of Government Communicators. Alexandria, Virginia. Dec. 5, 1990. British Psychological Society
1992 Media Release. February 24. A Taint of Scholarly Fraud
1976 *Time* December 6; 66.

Sir Cyril Lodowic Burt Dead; Educational Psychologist, 88.
1971 *The New York Times*. October 13.

The I.Q. Myth
1977 *60 Minutes*. June 26.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The Decline and Fall of the Freudian Empire

Hans J. Eysenck
University of London & Maudsley Hospital, London

Clothbound 224 pages

CONTENTS

Freud the Man
Psychoanalysis as a Method of Treatment
Freud and the Development of the Child
The Interpretation of Dreams
The Experimental Study of Freudian Concepts
Psycho-babble and Pseudo-history
Bibliography and Indexes

Freudian theory has recently attracted considerable attention as new developments in science and statistical processes have brought the validity of his conclusions into question.

The author, who may claim to be the world's most frequently cited psychologist, argues that Freudian psychoanalysis is largely imaginative, lacks experimental justification, and is totally lacking in any claim to scientific authenticity.

ISBN 1-87465-01-5 Price $25.00
Special Offer: $12.50 to *Mankind Quarterly* private subscribers
MASTERCARD AND VISA ACCEPTED

Scott-Townsend Publishers
P.O. Box 34070
N.W. Washington D.C. 20043
Tel: (703) 442-8010 Fax: (703) 847-9524

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The Assignment of Black Children to Special Education Classes

Russell Eisenman
McNeese State University

In a previous study (Eisenman, 1992) of school achievement by blacks, reference was made to blacks being more likely than whites to be assigned to special education classes. The present article examines this issue further, citing data from a study of New York City third graders. A similar finding emerges, although for males only. Two environmental and one genetic explanations are advanced as among the possible reasons for the greater likelihood of black children to be placed in special education classes.

Black students in high schools were found to have much lower academic achievement than white high school students in a recent study (Eisenman, 1992). In fact, that study showed that if recommended admissions criteria were used by the college (which currently has an open admissions policy), for every one white student denied admission two blacks would be rejected by the college. Among the references cited was one by Reschly and Ward (1991) who reported that blacks are more likely than whites to be seen as needing special education classes or to have mild mental retardation. A largely similar disparity was found by Ralph Scott (1988) on the basis of a wide-ranging study of black and white SAT achievement and assignment to special classes in racially integrated schools.

What this disparity of performance means has been highly debated. Would the disparities described Arthur Jensen as early as 1972, by Scott in 1988, and by Reschly and Ward in 1991, be found in even more recent studies? In searching for an answer I came across a study (Goldberg, McLaughlin, Grossi, Tytun & Blum, 1992) which enquired which children in the New York City school systems were most likely to be referred for special education. I will examine their study somewhat differently than they did, especially since they underemphasized the racial findings, which I believe to be worthy of greater scrutiny. For example, although differences between blacks and non-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

blacks stand out sharply in their results, they do not mention this fact in their abstract, and apparently did not include race as a variable in a statistical analysis of variables which would predict placement in special education classes.

The New York City Study

Method

Goldberg et al. (1992) chose to study 162 third graders in New York City public schools, since placement in special education classes is typically done there at the end of the second grade, based on children being identified as having learning or behavioral difficulties in the classroom. For race, they compared black and "other." It is unfortunate that they did not breakdown "other" into Hispanic, white non-Hispanic, etc., since data show that the New York City public schools are primarily composed of what are in the United States racial and ethnic minorities ("Data", 1992), with non-Hispanic whites being, in this school system, in the minority. Hispanics are best thought of as an ethnic group, and can be black, white, or any race. Thus, to the extent that the control group of "other" had many Hispanics or other groups who might be expected to do worse than non-Hispanic whites, the differences between blacks and "other" may underestimate the differences between blacks and whites. The authors obtained 45 special education students from three school districts and compared them with a random selection of 117 students from the general education population in the same three school districts.

Results

According to the authors, in 1980 of the total number of live births in New York City 35% were black. This percentage can be used to compare their findings with what would be expected by chance. More recent data suggests that the percentage of blacks in the New York City public school system is 38% ("Data", 1992). In any event, the finding that 60% of the black children were assigned to special education classes is striking, and is a high relative to either the expected 35% figure they present for black births, or the 38% figure I have found for blacks in the New York City public school system. According to their findings, this was especially the case for black males with unmarried mothers who had no formal education beyond high

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

school and were on Medicaid coverage at the time they gave birth. Yet the race difference does not hold up for females students. It appears to be black males who are especially likely to be assigned to special education classes. However, looking at blacks only, Medicaid coverage does not predict educational placement of special education vs. regular education classes.

What Does It Mean?

The findings by Goldberg et al. (1992) indicate that among blacks, males are at high risk for assignment to special education classes. Although they underemphasize the racial findings, making their interpretation less meaningful, at times, than what I would like, the data are clear that black males have a disproportionate likelihood of being considered in need of special education. The finding for males is reminiscent of the finding that, across races, there is a greater likelihood of boys than girls having dyslexia (Ansara, 1981), this being one kind of learning disability that could result in special education assignment or need. There might be biological reasons predisposing boys to be more likely than girls to have dyslexia, although social or environmental explanations have been advanced as well (Ansara, 1981; Shaywitz, Towle, Kesse, & Shaywitz, 1990).

Explanations

Explanations so far advanced to explain the racial disparities found by Goldberg et al. (1992), and the evidence of Reschly and Ward (1991) that blacks are considerably more likely than whites to be placed in special education classes or classes for the mildly mentally retarded, fall into some three classes, two of which are environmental and the third, genetic.

Environmental: Explanation 1

The first of the two environmental explanations involves the horrible conditions in which many black children find themselves. Many are born in extreme poverty with parents who are often not skilled as caretakers. Often, there is no father present, and the burden falls on the mother, who may be overwhelmed. Such a horrible environment, more likely for blacks than for whites in the United States, could explain all kinds of negative findings for blacks, such as high crime rates, poor showing on intelligence tests, poor school achievement, etc.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The cultural environment within low income black communities might also cause young black males to approach their studies with less enthusiasm than young black females, and this would serve to explain the different proportions in which black males and females are assigned to special classes. Data from the National Youth Employment Coalition (1991) show that the jobless rate for black male workers is twice that for white male workers, and has remained so over the past decade. They also report that 40% of the adult black male population is illiterate, and that black males are only 6% of the population in data from 1985, but accounted for 43% of the prisoner population. From birth to death, blacks have horrible statistics about their chances in life (life expectancy in 1986 was 65.2 years for black males vs. 72.2 years for white males). It could be, then, that the negative findings about blacks can be explained by the kind of environment in which they grow up, with all kinds of burdens and lack of optimism about the future. Opponents of this theory, however, early cited objective sociological studies which indicated that the level of cultural deprivation of American Indians was actually worse than that of urban blacks, yet American Indians regularly scored higher in intelligence tests than blacks (Kuttner, 1967).

Environmental: Explanation 2

A second environmental explanation has nothing to do with the conditions in which blacks grow up but with the perceptions of teachers and assessment staff. Given all of the findings mentioned above, including the prejudice and stereotypes about blacks in our society, it has been argued that the assignment to special education classes (including classes for the mentally retarded) is due to a bias on the part of who does the assigning. Under this explanation, it is suggested that a black child is viewed in a stereotyped fashion, and the teacher or assessment specialist is prone to see the child as less competent than the white child, and thus needing special education classes.

A modified view of this point is that given the problems the black children face under the Environmental 1 explanation, perhaps they have deficiencies due, not to innate ability, but to environmental circumstances. The teacher or assessment person might validly see differences between the black and the white child, but incorrectly, under this view, believe the differences to be something inherent in the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

black child, as opposed to appreciating the environmental conditions which cause the problems. Of course, even if the adult authority person correctly sees the environment as the cause of the problems, there is still the question of what to do with a child who is functioning in sub-par fashion. Possibly special education classes are necessary to try to overcome the problems created by the environment.

Genetic Explanations

An alternative explanation is that advanced by those behavior geneticists and psychologist who stress the contribution of heredity to the shaping of human personality, including intelligence. Genetic factors, they argue, determine the basic biological equipment on which environment operates. Just as there may be genetic reasons why boys have dyslexia more than girls (Ansara, 198l; Shaywitz et al., 1990), so too might genetics account at least in part for the ability of individuals, and of groups in the aggregate, to perform effectively in schools. As is well known, this has not been a popular attitude to take, and scholars who have interested themselves in the study of intelligence and heredity have been likened to Hitler, have had their lectures disrupted, and some have even been assaulted (Diodricks, 1980; Pearson, 1991). However, if gender differences can sometimes be explained in terms of genetics, we should at least consider the possibility of a similar explanation for some racial differences.

The tendency to shy away from even trying to explain differences because they might say something about differences between genders or between races is anti-intellectual and has no place in scientific work (Eisenman, 1991b; see Eisenman, 1991a for a treatment of how society often condemns and mistreats those who are identified as different, and once the deviance label has been applied, it is difficult to remove it). Genetic theories concerning the reasons why there is a greater likelihood of black males to be assigned to special education classes include issues related to intelligence, cognitive style, excitability, impulse control, etc. These differences might also explain the greater rates of violent crime by black males (Eisenman, l992-93), although social factors can also account for such findings. Thomas (1985) points out that there seem to be racial differences in body composition which could lead to different outcomes among the races in terms of how successful the different races might be in attempting various endeavors such as running, basketball, football, boxing, etc., as well as other

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sports or occupations demanding specific physical skills. Arthur Jensen, a leading proponent of the theory that genetically influenced differences in intellectual ability exist, reported observing that blacks blacks and whites assigned to special education classes both seemed to be retarded in the classroom, with more or less equal ability at academic tasks, but that while the white students also appeared to be retarded in their recreational activities, the black students behaved more or less normally outside the classroom and were only "retarded" when it came to tackling intellectual problems (Pearson, 1991). While there is no consensus as to why black children would be more often sent to special education classes than non-blacks, we should keep the door open for a possible genetic component, while avoiding social stereotyping of blacks based on popular prejudice (Eisenman, 1991a).

Genetics seems to explain, at least in part, many things which we have thought of as not having genetic explanations, according to Lykken, McGue, Tellegen, and Bouchard (1992). They mention the following as having, at least partially, a genetic basis: extraversion, leadership, teaching potential, parenting, and artistic ability. And, Koziol and Stout (1992) believe that children with Attention Deficit Hyperactivity Disorder may have frontal lobe dysfunction. Such children have difficulty in focusing, maintaining attention, and inhibiting extraneous response. Many children in school seem to fit this description, and if frontal lobe pathology turns out to explain the behavior, we need to know if genetics accounts for the brain dysfunction, and if there is a difference related to gender, race, etc.

Conclusions

The three possible explanations, one genetic and two environmental, are by no means mutually exclusive. All may very likely be partially true, or there may yet be other factors which have not yet been identified but which also play a part in determining the situation. Complex interactions between genetics and environment undoubtedly exist. However, there does seem to be a consistent tendency for black children to be assigned to special education classes or to be seen as having mild mental retardation, and there is a crucial need to determine the reason or reasons for this phenomenon, in order that appropriate corrective action can be taken, and that funds (and peoples' lives) are not wasted by efforts based on inaccurate and fallacious assumptions which can only result in solutions that are

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

doomed to fail. Stereotype solutions based upon inaccurate understanding of the causal nexus which results in this racial disparity are simply wasted effort in that they cannot mitigate the hardship experienced by those involved.

It is quite true that environmental conditions can be so severe as to lead to biological handicaps which are permanent or extremely difficult to change. For example, drug habits or inadequate nutrition can have long-lasting effects which, at some point, become permanent biological realities. The reverse is also true: biological factors can contribute to the degradation of the environment. The study of why black children are disproportionately numerous in special education classes raises a host of issues which are complex but which involve extremely important social problems. How we deal with these social problems may have a lot to do with the kind of society in which we live.

References

Ansara, A. (Ed.),
1981 Sex Differences in Dyslexia. Baltimore, MD: The Orton Society.
Data: New York City Schools.
1992 *Teaching Tolerance*, 1 (1), (Spring) p. 11.
Diedrichs, G.
1980 William Shockley: Racist or realist? *Hustler*, 7 (2), pp. 36-36, 38, 48, 132-134.
Eisenman, R.
1991a From Crime to Creativity: Psychological and Social Factors in Deviance. Dubuque, IA: Kendall/Hunt.
Eisenman, R.
1991b Sex differences in the perception of ethics?: A comment on Robinson and Gross. *Journal of Mental Health Counseling*, 13, 144-146.
Eisenman, R.
1992 Academic achievement in high school of blacks and whites: A retrospective study of freshman college students who would not have been admitted without open admissions. *The Mankind Quarterly*, 32, 377-381.
Eisenman, R.
1992-93 Race, sex, and age: A nationwide study of juvenile crime. *National Forum of Educational Administration and Supervision Journal*, 10, 73-76.
Jensen, Arthur R.
1972 Genetics and Education, New York: Harper and Row.
Goldberg, D., McLaughlin, M., Grossi, M, Tytun, A., & Blum, S.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

1992 Which newborns in New York City are at risk for special education placement? *American Journal of Public Health*, 82, 438-440.

Koziol, L. F., & Stout, C. E.
1992 Use of a verbal fluency measure in understanding and evaluating ADHD as an executive function disorder. *Perceptual and Motor Skills*, 75, 1187- 1192.

Kuttner, R.E.
1967 Race and Modern Science. New York: Social Science Press

Lykken, D. T., McGue, M., Tellegen, A., & Bouchard, T. J., Jr.
1992 Emergenesis: Genetic traits that may not run in families. *American Psychologist*, 47, 1565-1577.

National Youth Employment Coalition
1991 Young African-American males: Understanding the problems, shaping solutions. *Future Choices*, 3 (2), 77-84.

Pearson, Roger.
1991 Race, Intelligence and Bias in Academe. Washington, D.C.: Scott-Townsend Publishers.

Reschly, D. T., & Ward, S. M.
1991 Use of adaptive behavior measures and overrepresentation of Black students in programs for students with mild mental retardation. *American Journal on Mental Retardation*, 96, 257-268.

Scott, Ralph.
1988 Education and Ethnicity: The U.S. Experiment in School Integration, *Journal of Social, Political and Economic Studies, Monographs Series No.17*.

Shaywitz, S., Towle, V., Kesse, D., & Shaywitz, B.
1990 Prevalence of dyslexia in boys and girls in an epidemiologic sample. *Journal of the American Medical Association*, 181, 143-157.

Thomas, R. M.
1985 Motor development. In: T. Husen & T. W. Postlethwaite (Eds.), The International Encyclopedia of Education (pp. 3434-3438). New York & London: Pergamon.

Footnote: Address correspondence or reprint requests to Russell Eisenman, Department of Psychology, McNeese State University, Lake Charles, LA 70609-1895, USA.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Intelligence and National Achievement

Editor
Raymond B. Cattell

CONTENTS INCLUDE

INTRODUCTION: THE CONTEMPORARY AWAKENING
Raymond B. Cattell

THE ROLE OF PSYCHOLOGICAL TESTING
Raymond B. Cattell

TEST SCORES AS MEASURES OF HUMAN CAPITAL
Barbara Lerner

FERTILITY DIFFERENTIALS AND THE STATUS OF NATIONS:
A SPECULATIVE ESSAY ON JAPAN AND THE WEST
Daniel R. Vining, Jr.

POPULATION INTELLIGENCE AND NATIONAL SYNTALITY
Raymond B. Cattell and Jerry M. Brennan

APPENDIX: SOME CHANGES IN SOCIAL LIFE IN A COMMUNITY
WITH A FALLING INTELLIGENCE QUOTIENT
Raymond B. Cattell

ISBN 0-941694-14-3
Hardback, 176 pages
$30.00
(Only $ 15.00 plus $1.50 postage to private MQ subscribers)
Cliveden Press
6861 Elm Street, Suite 4H
McLean, Virginia 22101

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Book Reviews

The Population Explosion
By Paul R. and Anne H. Ehrlich
IBSN 0-671-68984-3

In *The Population Explosion*, the Ehrlichs refer to data relating to population growth and document the limits and the significant degradation in earth resources which would be needed to support that population. Particularly compelling are calculations of how quickly technological advances give rise to and are also swamped by the uncontrolled growth of population. There are some forty pages of references with explanations that give background and detail of interest to the general reader. The text covers projections of population growth, limits to that growth, and stresses the ecological disaster confronting the higher forms of life with the continued expansion of human population and unrestrained efforts to exploit technological advances without regard to the threat to the ecological balance. However, it falls down seriously on the "what can you do?" addendum.

One sample of the kind of data provided is an estimate of the rate of soil loss in the world due to erosion aided and abetted by aggressive farming practices. This is estimated at 24 to 26 billion tons per year! Which is to say that humanity is now taking food out of its capital account, even though we foresee increasingly greater needs in the future. Another example given is the draw-down of aquifers used for irrigation, which, scarcely incidentally, is usually destructive to the soil as well. The decreases in the level of the Ogalla aquifer were stated to be on the order of 4 to 6 feet per year. Replacement water from the surface might replenish it at some half-inch per year. Which means that perhaps one year out of one hundred we can irrigate from the aquifer without dipping into capital!

A child born in 1993 would be seventy in 2063. If the world population continues to about double every forty years, then the population will then be some 3.5 times as large as it is now. Given the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

problems we are having today, and if we feel any responsibility to our (immediate!) children, we have an obligation to sit up and take notice!

This book is a powerful argument that we should do something and *now*. The arguments *defining the problem* are cogent, extensive, and, at least with respect to purpose, unassailable. The arguments defining the *possible solutions* fail to come to grips with the ultimate reality, and that our very heavy investment in efforts to save the existing population of the world from famine is merely acerbating the problem by ensuring that nature's efforts to bring rapidly expanding populations into line with their resources is temporarily defeated. Perhaps the intent is to encourage at least a start, rather than frightening people into throwing up their hands and walking away. But the basic nubbin must be faced, someday, and the sooner we attempt to restrict population growth the more likely we are to succeed.

Paul and Anne Ehrlich argue that since the West cannot do anything much to discourage the Third World from continuing to expand its numbers – the entire population explosion is associated with the Third World – the more advanced nations should cut back on the number of children *they* have, and leave the world to be inherited by the children of the Third World. What is more, in the meantime the more advanced nations (whose population is generally not growing) should transfer even more wealth to help the Third World expand its population yet further. The argument is replete with humanitarianism, but unfortunately it is very short on logic.

India, for example, increases its population every four days by the total population of Iceland, Europe's oldest democracy, and every month by the total population of Norway, which gives more of its gross national product than any other country to helping the Third World feed its ever-growing child-population.

In the past two years the world population has grown by a figure equivalent to the total living population of Britain, France and Germany. And the population of most West European countries is actually falling, if one excludes the Third World immigrants who still tend to have larger families even after they have settled in Europe. The indigenous populations of Germany, Holland and Scandinavia are declining rapidly (though this decline is cloaked by immigration from Turkey, Vietnam, North Africa, the Middle East and South Asia. Even families in Roman Catholic Italy are producing only 1.3 children for every married couple, while women in Africa average six or more live

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

births, depending on which part of the continent one is looking at.

Overseas, the vast, exponential increase of Third World populations is destroying the forests of the world, creating deserts where there was formerly greenness, lowering vital water tables (or aquifers, mostly created in the last ice age) and eroding the essential top soil to the point of ecological disaster, wiping out ancient oxygen-creating tropical forests – that will never replace themselves once the ecological conditions that created them are destroyed – and generally bringing the world rapidly nearer to ecological disaster.

Yet according to the Ehrlichs, American and European parents should start to realize that "rich kids are a much greater threat to our future than poor kids." They must free themselves from all "racist" notions, and the fact that even in America and Europe, far more children are born to ghetto parents than to middle class parents does not matter at all, since middle class children "consume more" than ghetto or Third World children. Besides, if middle class Americans stop having children themselves they will be able to divert their entire resources to helping to feed the increasing numbers of Third World children. So the Ehrlichs argue that:

> Middle class American children who make the mistake of having two children should teach their children not to incur the cost of producing and educating children of their own ...

and:

> ... Not only are notions about the rich and intelligent passing on their good genes scientific nonsense, they are dangerous because they promote over-reproduction by those with the heaviest impact on the planet [by which they mean those who enjoy the highest lifestyle] ...if more Americans take the responsible step of having no children or only one, we could much sooner end growth ...

Nobody wishes to see all higher life forms destroyed by pollution, but the Ehrlichs overlook the fact that the surplus population of the Third World is pouring into the more advanced Western countries, and once there tends to use energy and pollute just as much as the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

native population already does. Nobody is asking the guilty nations of the Third World to go into extinction, merely that they should show some reproductive responsibility in return for the benefit of Western medicine. The advanced nations are not contributing to the world population explosion (except by their charity to the incontinent Third World), and yet the Ehrlichs ask the peoples of the West to become "sin-eaters" for the Third World, and to refrain from having children themselves while helping the children of the former to survive? The advanced nations started the Third World population explosion by providing the Third World with advanced medicines and extra food. But just as they caused the explosion – though limiting their own population – through their innovative technology, so it is they who are best positioned to provide solutions for the problems they have caused. Surely there must be some better way to save the world from over-population other than by eliminating those who are best placed to produce a solution to what is a scientific problem!

Nature's Mind, The Biological Roots of Thinking, Emotions, Sexuality, Language, and Intelligence
Michael S. Gazzaniga
Basic Books, 1992.

Michael S. Gazzaniga has written a blockbuster. The premise of *Nature's Mind* is that we are born "pre–wired," that selection, not adaptation, is the fundamental factor of our existence and of our development as individuals. He argues that the *tabula rasa* concept of Locke and others is not partially, but totally false. Gazzaniga writes "For the selectionist, the absolute truth is that all we do in life is discover what is already built into our brains."

Gazzaniga is perhaps best known as co–discoverer of the "split–brain" phenomenon. His earlier works include *The Social Brain* and *Mind Matters*. Neither work has brought the onslaught of indignation from the social engineers that I fully expect *Nature's Mind* will provoke.

Twelve leading writers in various areas of human development attended including, besides Gazzaniga, Wolf Singer, Steven Pinker, and David Premack, among others. Gazzaniga explains many of their beliefs in some detail, even when he profoundly disagrees.

Using a curious juxtaposition of the great minds in human

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

evolution and related fields, such as Darwin and Lamarck, he proceeds to compliment both of each pair on their real contributions and brilliance. Marshaling a wealth of data, beginning with the most recent evidence from immunology, that "antibodies are chosen from a *preexisting* library of antibodies ...." Gazzaniga builds a strong case for the absolute primacy of selection across the spectrum, from language and intelligence to emotions and thought itself.

In terms of the developing mind of children, Gazzaniga reviews the work of David Rowe and Robert Plomin on "shared" and "non-shared" environments. He argues that economic and environmental factors are of significance only in terms of selecting for some preexisting capacity, and as such, their importance is "random and can never be deciphered." He states that the studies "leave us with the conclusion that parents have little influence on their children, and that genetic factors ought to be considered to explain the variation" between siblings. He goes on to say, "The economic hypothesis is not valid. Ideally, as we come to a deeper understanding of why people do what they do, we will have a far richer, more biologically based, theory of personality."

Gazzaniga believes that the ways in which we attempt to solve social problems, sway opinions and interact with our environment are "doomed to fail" because they ignore the big picture of who we are and how we work. His discussion of social dependency and perceived control is fascinating. He argues that many of our social programs for education, poverty, crime, drugs and delinquency are not only ineffectual, but quite possibly contribute to our problems through the learned helplessness response. Societies work when "they allow each individual to discover what millions of years of evolution have already bestowed upon mind and body."

Even though he believes that people generally evaluate any new evidence in a fashion designed to maintain their current beliefs, he does leave room for hope believing that "the quintessential human property of mind – rational processes – can occasionally override our more primitive beliefs. It isn't easy, but when it occurs, it represents our finest achievement."

Louis R. Andrews

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

abstracts in anthropology

ARCHAEOLOGY / CULTURAL & PHYSICAL ANTHROPOLOGY / LINGUISTICS

Managing Editors: **ROGER W. MOELLER** and **JAY F. CUSTER**

The **only** comprehensive abstracting journal in the field, *Abstracts in Anthropology* has established itself as an indispensable reference and research tool for the international community of anthropologists. *Abstracts in Anthropology* covers a broad spectrum of significant, current anthropological topics from a vast number of periodicals.

Several thousand abstracts, selected and classified, **fully indexed by author and subject,** provide a thorough coverage of anthropological scholarship in all its subfields:

- Cultural Anthropology
- Physical Anthropology
- Archaeology
- Linguistics

Abstracts in Anthropology has evolved into an eclectic overview of the many faceted realms of anthropology, including:

- Field Techniques
- Basic Site Reports
- Innovative Analytical Studies
- Artifacts from Around the World

Subscription Information: Sold as a two volume group - 8 issues yearly
ISSN: 0001-3455 Institutional Rate: $249.00 + $9.00 postage & handling U.S. & Canada, $18.70 elsewhere.

—please direct orders & inquiries to:

Baywood Publishing Company, Inc.
26 Austin Avenue, Box 337, Amityville, NY 11701
Call (516) 691-1270 Fax (516) 691-1770

Orders only - call toll-free (800) 638-7819

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

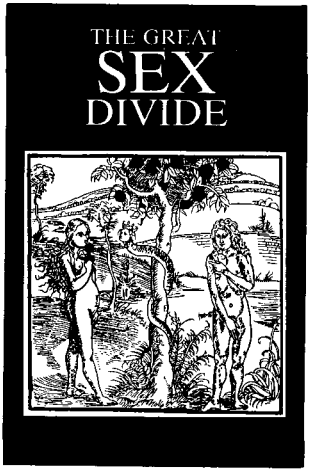
The Great Sex Divide

Glenn Wilson

Institute of Psychiatry, University of London

CONTENTS

Sex and Evolution
Evidence from Human Biology
Evidence from Animal and Other Cultures
Can the Differences be Suppressed?
Sexual Anomalies and Difficulties
Talent and Achievement
Aggression and Crime
Social Forces and the Sex War



The author, an eminent psychologist, examines the accumulated evidence for innate psychological differences between men and women which reveal the false assumptions on which much feminist literature is based.

ISBN 1-878465-04-X
Paperback, 160 pages
Bibliographical References and Index
Price: $20.00
VISA AND MASTERCARD ACCEPTED

Scott-Townsend Publishers
P.O. Box 34070
N.W. Washington, D.C. 20043
Tel: (703) 442-8010 Fax: (703) 847-9524

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED